



MINISTRY OF EDUCATION NEW ZEALAND

Te Tāhuhu o te Mātauranga Aotearoa



Evaluative Study of Co-located Schools established following the Christchurch Earthquake

Report to the Ministry of Education

Vince Ham, Gina Cathro, Michael Winter, Josephine Winter
CORE Education Ltd

ISBN: 978-0-478-38638-7

ISBN: 978-0-478-38637-0 (web)

RMR-989

© Ministry of Education, New Zealand 2012

Research reports are available on the Ministry of Education's website Education Counts:

www.educationcounts.govt.nz/publications.

Opinions expressed in this report are those of the authors and do not necessarily coincide with those of the Ministry of Education.

Evaluative Study of Co-located Schools Established following the Christchurch Earthquake

Report submitted to the Ministry of Education

Vince Ham, Gina Cathro, Michael Winter, Josephine Winter

CORE Education
PO Box 13678
Christchurch

Acknowledgements

In presenting this report we would like to acknowledge the collaboration, support and involvement received from three researchers from the Research and Evaluation Division of the Ministry of Education throughout the project. Karen Wong, Paula Pope and Luke Smith collaborated with the CORE Education team in the conduct of the interviews, the analysis of the interview data, and the development of the survey questionnaire. We also appreciate Karen and Paula's advice and assistance with the editing of the final report.

We would also like to thank Dr Ronnie Davey from the University of Canterbury for agreeing to act as a critical friend to the project and to peer review the final report.

Most of all, we would like to acknowledge and thank the principals, staff, students and families from the co-located schools, and the various Christchurch-based Ministry officials, who agreed at a difficult time to share their respective experiences of the schools' co-location.

Table of contents

Executive summary	1
1. Introduction	7
2. The co-location arrangements	9
2.1 Introduction: 'site-sharing' versus 'shift-sharing'	9
2.2 Arrangements made in site-sharing schools	12
2.3 Arrangements made in shift-sharing schools.....	15
3. The impacts of co-location on schools, students, staff and parents/whānau	23
3.1 Introduction.....	23
3.2 School governance and crisis management.....	23
3.3 Family life and routines.....	25
3.4 Curriculum, teaching and learning	33
3.5 Social and professional relationships at school	45
3.6 School identity, culture and community connection.....	52
4. Information and communication (ICT) systems	57
5. Conclusions	59
6. Evaluation approach and methodology	61
Appendix. Survey questionnaires: students, parents, staff	63

Executive summary

As a result of the February 2011 earthquake and subsequent aftershocks, a number of schools in the central city and the eastern suburbs had sustained significant damage or were located in the ‘red zone’¹ and unable to reopen on their existing site until either extensive repairs and rebuilding had been undertaken or decisions had been made about the viability of the land with respect to future redevelopment. In order to get students back into learning as quickly as possible, it was decided to co-locate the affected schools on other schools’ sites for periods expected to vary from a month or so to the rest of the 2011 academic year, and potentially beyond that.

The nine relocating schools (two primary, one intermediate and six secondary) thus became ‘guest’ schools, sharing a school site and facilities with one or more ‘host’ schools (one special, one primary, two intermediate and five secondary) that had been less affected by the earthquakes.

The key purposes of the study are to identify and describe the various co-location arrangements made by the schools concerned, and to identify the impacts to date (August 2011) of co-location on students, families, teachers and schools. Note that some schools will remain co-located into the 2012 school year.

The key findings of the study are that:

- given the good will and commitment of the parties involved, co-location is a workable solution in disaster situations like that generated by the Christchurch earthquakes, but it was not seen by respondents as educationally ideal or sustainable in the longer term
- co-location was more problematic among the shift-sharing schools than the site-sharing schools, in particular for the afternoon/guest shift-sharing schools
- many of the schools involved took the opportunities afforded by co-location to review many of the ‘taken-for-granted’ aspects of school processes, to reflect on their distinctive cultures and values, and to reconsider their particular relationships with their respective communities.

Co-location arrangements

Broadly, there have been two forms of co-location operating in the co-located school sites. For convenience we refer to ‘site-sharing’ as the arrangement made in several cases whereby two (or in one case three) schools operated on a single site at the same time. In the ‘shift-sharing schools’ (all but one secondary school), the ‘host’ school operated on the site in the mornings and the ‘guest’ school operated in the afternoons.

In the shift-sharing sites the normal school day was compressed to be up to two hours shorter than normal, with the morning schools starting up to an hour earlier and the afternoon schools finishing up to two hours later than normal.

Ministry-provided bus services were arranged to transport guest schools’ students between their former school site and their new co-located site at the beginning and end of each school day at no cost to the school or students.

The extent of sharing of facilities, teaching resources and equipment between guest and host schools has varied from site to site. At most sites, additional, relocatable buildings have been brought in to accommodate guest schools’ administration and office blocks and some classrooms. Many host site-sharing schools adopted a ‘what is ours is yours’

¹ The ‘red zone’ indicates a public exclusion zone due to the risk posed by damaged buildings or land on the site or in surrounding properties.

approach to sharing resources, while at the shift-sharing (secondary) schools resource sharing has varied more on a department-by-department basis.

On the whole, in both site-sharing and shift-sharing schools, hard resources such as computers, data projectors, gymnasium and sports equipment, musical instruments and more expensive art equipment have been shared, while guest schools, where they could, have removed soft resources such as software, book sets, art supplies, task sheets and so on from their original sites and brought as much as they could to the new sites. Negotiations between the principals and school boards of co-located schools regarding arrangements for sharing the cost of wear and tear on the host schools' plant and resources has been problematic at several co-location sites.

At most shift-sharing sites, and at one of the site-sharing sites, the schools tried to keep social contact between the two student bodies to a minimum, and in most, but not all sites, there was relatively little interaction between the two groups of teaching staff.

Effects on family life

The effects of co-location on the family lives of staff, students and parents/whānau were often little differentiated in people's minds from the effects of the earthquakes in general. The effects on family life that were attributable to co-location, have been greater for the communities of shift-sharing schools, in particular teachers, than those of site-sharing schools, and were greater for the families of guest schools than host schools. Overall, 91% of students, 84% of parents and 76% of staff at shift-sharing schools said their family relationships had either not changed or improved as a result of co-location.

The greatest effects of co-location on family life have related to disruptions in transport, daily routines, and anxieties about students' safety as a result of timetable changes in the shift-sharing schools. Changed commuting patterns and commuting longer distances, along with children's security while at home alone or travelling to/from school in the dark, have been of concern for families in both host/morning and guest/afternoon shift-sharing schools.

Parents of children at guest schools were twice as likely to report that their personal finances had been negatively affected by co-location as parents of students at host schools. Thirty-seven percent of parents at guest schools reported increased personal costs, probably reflecting the increased cost of transport. Students at guest/afternoon schools were much more likely to report negative effects (loss of part time jobs, increased transport costs etc.) on their personal finances than students at host/morning schools.

While the students in shift-sharing schools tended to spend their respective mornings or afternoons at home, their teachers tended to spend that time at school. Seventy percent of teachers stated that they mainly spent their non-classroom time at school, doing lesson preparation, marking, school administration or attending school meetings. Several of the teachers in interviews said that their daily work pattern had changed in that their working day was extended as they were now doing at school a lot of what they had previously done at home during the evening.

Effects on curriculum, teaching and learning

For the most part, teachers in the *site-sharing* schools continued to work to more or less the same timetable as before, and for more or less the same number of hours over the day. They taught their own classes and taught those students all or most of what was, in most respects, a normal day but in a different location. Accordingly, there was little report from the site-sharing primary and intermediate schools of changes in the content they covered or the ways in which they taught it.

In the co-located shift-sharing schools, however, students have covered fewer curriculum topics, teachers have taught differently, and anxiety levels about achievement in NCEA assessments have significantly increased. Insofar as these effects are attributable to co-location (as opposed, for example, to staffs' or students' domestic circumstances and the earthquakes), they seem to have been largely a consequence of the shortened school day and the compression of lessons into shorter-length periods in the shift-sharing schools.

Staff at shift-sharing schools, in particular, said that they were on the whole working longer hours, and that their work had 'intensified' significantly during co-location. In many schools, senior management staff felt that their normal duties have suffered because of the extra workload imposed by post-earthquake and co-location administrative tasks, whereas, for classroom teachers, much of this intensification was attributed to the shorter periods and lack of preparation or transition time between classes under the new timetable.

The staff, parents and students at the shift-sharing secondary schools were generally agreed that methods of teaching have changed in notable ways during co-location. In particular, lessons have changed to be more teacher-centred and more 'focused', with less time available for student feedback and interaction than normal. However, there is much less consensus as to whether those changes have been for the better or the worse in terms of student outcomes and achievement. Some teachers, and students, thought that through these changes their teaching has become more effective during co-location, while others claimed that it has become less effective. Twenty-five percent of staff at shift-sharing schools said the changes had made their teaching more effective whilst 19% felt they had changed to be less effective. Senior secondary students were more likely to say that teaching methods had changed to be less effective than junior secondary students, and junior secondary students were more likely to say the changes had been for the better.

In the shift-sharing secondary schools, anxiety about student performance in the NCEA was high, with nearly half of senior students saying they feel more anxious about NCEA than normal, and over half saying they expect to achieve lower grades in standards. As a result of co-location and the compression of their school timetables, teachers and students in the shift-sharing schools may have covered less of the curriculum in lessons and many, though not all, have reduced the number of NCEA assessments attempted.

Senior students and parents of senior students were more likely than junior students and parents of junior students to report a deterioration of academic performance because of co-location. Over a third of senior students and parents of senior students, and two thirds of staff, believed that academic performance and student motivation had deteriorated because of co-location. Students, parents and staff in guest schools were more likely to report negative effects on attitude and performance than in host schools, and these were felt to be greater for senior students than for juniors. This reflects and reinforces a generally greater concern for students doing high stakes assessments and the often-expressed preference for morning over afternoon timetables in co-located schools.

Attendance and behaviour were reportedly less negatively affected by co-location than attitude and academic performance. The majority of parents, students and staff in host/morning schools reported that student attendance and behaviour had either not changed or improved during co-location, though up to half of those in guest/afternoon schools reported a deterioration in these. In contrast, a number of staff interviewed reported improvements in student behaviour particularly in class. They attributed this to reduced time within classes, increased intensity of lessons, the absence of formal lunchtimes and opportunities to congregate together.

When analysed according to students' ethnicity, the surveys show few significant differences between or among Māori, Pasifika and European students' responses. Some effects on student outcomes may have been slightly greater among Pasifika students, but Māori and European students tended to respond similarly to each other on all questions.

Effects on social and professional relationships

Though stress levels seemed high in the schools overall, this appears to be due more to other factors than co-location itself. More staff reported feeling stressed than other groups, in particular, staff at the guest schools (40%). Fewer students and parents seem to have been stressed by co-location. About 80% of students and 78% of parents stated they had been either 'not stressed' or 'slightly stressed' by co-location.

Students were more optimistic about their social and professional relationships during co-location than were staff and parents on their behalf. Though they acknowledged a lessening of interaction with teachers and other students while at school, students in shift-sharing schools particular seemed to like the shorter school days as it gave them more time for socialising outside of school and doing other activities.

At the same time, there were high levels of resilience and commitment by staff, students and parents towards their particular schools, and high levels of good will between the sharing schools — their desire, as several expressed it, 'to make this work'. Staff at both the site-sharing sites and the shift-sharing sites who responded to the survey were more likely to report that their professional relationships had stayed the same or changed for the better (65% and 68%). The guest school communities were grateful to their hosts and the host school communities were generous in their accommodation of their guests. While not without stresses and strains, it was this sense of good will towards each other and sense of sacrifice, as much as any practical systems or organisations, that made the relationships 'work' in the co-locating schools.

Effects on school identity and culture

The effects of co-location on the identities and cultures of the schools have been somewhat double-edged in nature. On the one hand, co-location with another school, combined with relocation from one physical site to another (often to a very different school in an unfamiliar neighbourhood), the compression of the school day into fewer hours, and the curtailment of many co-curricular activities, seems to have decreased the opportunity for co-located schools to build and consolidate their distinctive cultures and identities during the year. In particular, Year 9 students at the secondary schools, who had just joined the school when the earthquake hit, have had less chance to become familiar with the culture of the school, and Year 13 students have had less opportunity to lead its development

On the other hand, co-location has also provided an unusual opportunity for students and communities to compare and contrast their schools' 'ways of doing things' with the ways of other schools. Students, parents and staff spoke of becoming more self-aware as schools by observing at close quarters the facilities, processes and values of one, and in some cases two, other schools. Boys' schools had to accommodate the presence of girls on their campus, high decile schools combined with low decile schools, large schools shared with smaller schools, schools with one type of 'special character' had to share with schools of another 'special character', and so on. For the most part this has resulted in the schools feeling a greater sense of their unique identities and their affiliation to their particular community.

Many of the shift-sharing schools have, or are actively considering changing their normal timetable as a result of the co-location experience. The preferred changes consist of starting earlier and finishing earlier in the day than before, with shorter breaks between classes.

Most feel that co-location has been largely successful as a short term fix to an unprecedented situation, but few feel that such co-location is sustainable in the longer term. Anxieties about longer term sustainability are especially great among those schools that are likely to continue co-location arrangements beyond the end of the current academic year.

Information and communication systems

There was a range of ICT challenges faced by several of the co-locating schools, many related to failures of backup systems and lack of access to student records in damaged buildings and the like resulting from the February earthquake.

Co-location and the earthquakes generally showed the importance of maintaining constant communication between schools and their communities through as many media as possible.

Some schools used social media to good effect in maintaining communications with parent communities, but use of on-line alternatives for teaching and learning was sporadic rather than typical among the schools.

Further research

We suggest that three key areas for further research on the Christchurch schools' experience of co-location are:

- *A comparative analysis of the 2011 NCEA results for the co-located schools.* It was beyond the scope and timing of this study to report on the effects of co-location on student achievement as evidenced, for example, by NCEA results and other end-of-year assessments. Such a study could compare the results of both host and guest co-located schools with their own previous results, with the results of other earthquake-affected but not co-located Christchurch schools, and with national averages. This would better determine the effects of co-location on students' academic achievement than the current study was able to do.
- *An ethnographic study of the sites where co-location is known to be continuing into a second year or more.* It is one of the findings of this study that the parents staff and students of co-located schools have seen co-location as a workable short-term solution to an emergency situation, but that it is not seen as sustainable in the longer term. While most of the guest schools have returned to their original sites, or are scheduled to do so for the beginning of next year, up to seven of the schools are expected to continue co-location in some form into the coming academic year. Such a study would help determine the limits of viability of school co-location as a sustainable disaster response.
- *A study of re-location, and the issues faced by both as guest schools return to their home sites and host schools try to return to their 'old normal'.* The current study has described the experience of co-location at a point in time where some schools had already relocated back to their original sites, and some were in the process of doing so. Anecdotal evidence suggests that the process of relocating back to school's original sites has also raised issues around the re-establishment of the schools on usable but still compromised sites that have implications for policy development and disaster management in such circumstances. Such a study would round off the current study by providing a more complete view of the entire cycle of co-location as an aspect of disaster recovery, and would allow some further insight into the possible long-term effects of co-location as schools return to their former sites and practices.

1. Introduction

CORE Education submits the following report to the Ministry of Education in response to its request for proposals for an evaluative report on the impacts on schools, teachers, students and their families of the co-location of certain schools after the Christchurch earthquake of February 2011.

As a result of the February earthquake and subsequent aftershocks, many Christchurch schools suffered damage to their buildings, land and facilities, or were located in the 'red zone'. A number of schools in the central city and the eastern suburbs were so damaged that they were assessed as being unable to reopen on their existing site until either extensive repairs and rebuilding had been undertaken or decisions had been made about the viability of the land at their existing sites with respect to future redevelopment. In order to get students back into learning as quickly as possible, it was decided to co-locate the affected schools on other schools' sites for periods expected to vary from a month or so to the rest of the 2011 academic year. Note that some schools will remain co-located into the 2012 school year.

The nine relocating schools studied (two primary, one intermediate and six secondary) thus became 'guest' schools, sharing a school site and facilities with one or more 'host' schools that had been less affected by the earthquakes. For convenience we refer in this report to the process and state of such schools sharing a common site and facilities as 'co-location', and to both 'host' and 'guest' schools as the 'co-located schools'.

Research focus

In evaluating the co-locations it has been important to consider that in this instance the co-location of schools was not a pre-planned event, nor was it undertaken for reasons of the betterment of schooling for the communities involved. It was an emergency measure aimed at re-establishing a number of schools that had been destroyed or severely compromised as a result of the earthquakes and aftershocks, and that otherwise would not have been able to provide *any* form of educational provision for their respective communities. It was, as one parent put it, 'making the best of a bad situation.' None of the people we spoke to or surveyed described co-location itself as representing a desirable state of affairs, or as something they see as viable in the longer term. But they do feel it has been a practicable, workable solution to the disaster situation that the city currently faces, as well as having achieved its goal of getting students back into some form of learning. This report, therefore, aims to identify some of the lessons that might be learned from the Christchurch experience of school co-location not so much as an educational ideal or as part of planned school reform, but as an emergency measure implemented in response to civil disaster.

The research questions guiding the study were:

1. How have co-location models operated in the schools to date (August 2011)?
2. What, to date, have been the impacts of the co-location on students, families, teachers and schools?
3. What lessons have been learned about school co-location as a disaster management response?

The research took the form of a mixed method study of staff, students and parents in all 18 of the schools that were co-located in Christchurch as a result of the February earthquake. In each school, interviews were conducted with the principal and up to four each of: students, management and administration staff, teaching staff, and parents. Interviews were also held with several stakeholders including regional Ministry officials, the person contracted to provide IT system support to the schools, and a former Christchurch principal employed by the Ministry as a support person for the principals of earthquake-affected Christchurch secondary schools. Interviews were conducted in all but one of the 18

co-located schools. The interviews were followed by whole-population surveys of students, staff and parents, again in all but one of the 18 schools. The figures in this report derive from survey responses received to Friday 7 October 2011. Responses to that date had been received from 1,632 parents, 633 staff and 6,061 students, representing estimated response rates of 17%, 60% and 63% respectively. These responses were collected from 17 of the 18 co-located schools.²

For more information about the research methodology see section 6: Evaluation Approach and Methodology (page 61).

The report is in three main sections. The first of these describes the various models of co-location that the schools have implemented, highlighting major similarities and differences among the schools with respect to the arrangements made and the logistics and mechanics of co-location. The emphasis in the second section is on identifying the ways, both positive and negative, in which co-location has impacted to date on the lives of the schools, teachers, students and their families. The conclusion contains some general suggestions as to what has been learned from the experience to date and how effective co-location has been as a strategy to deal with situations such as that created by the February earthquake and its aftermath.

² The study did not include schools that co-located after the major aftershock of June 2011.

2. The co-location arrangements

2.1 Introduction: 'site-sharing' versus 'shift-sharing'

In general, there were two basic forms of co-location put in place by the co-locating schools. In the first of these arrangements, which we refer to throughout this report as 'site-sharing', both host and guest schools ran in parallel on the same geographical site. Each school had, for the most part, its own classrooms and management on-site, and both the host and guest schools ran a more or less normal timetable in tandem with each other. As far as was practicable these operated as separate schools in parallel, at the same time on the same site, using classrooms and other facilities that the host school had as spare capacity in some cases (Christ the King Primary School – Merrin Primary School) and/or temporary, relocatable buildings/classrooms brought in for the purpose in others (Discovery One – Unlimited Paenga Tawhiti – Halswell Residential College). In one case (Christ the King Primary School), only some of its classes (Years 6-8) were relocated, to occupy spare classrooms at Merrin Primary School. In the case of the intermediate school (Heaton Intermediate School) all classes were co-located but they were split between Breens Intermediate School and Casebrook Intermediate School as their hosts. Year 7 students went to Casebrook Intermediate School and Year 8 students to Breens Intermediate School. In the case of the two central city schools, Discovery One (primary) and Unlimited Paenga Tawhiti (secondary), both were moved together to occupy purpose-built relocatable classrooms and some spare existing spaces at Halswell Residential College in the outer suburbs.

Table 1: The schools in the study and length of co-location period

Site	Shift-sharing schools	Host-Guest	Type of School	Period Co-located 2011
A	Avonside Girls' High School	Guest	Secondary – state	March-December (est.)
A	Burnside High School	Host	Secondary – state	March-December (est.)
B	Cashmere High School	Host	Secondary – state	March-July
B	Linwood College	Guest	Secondary – state	March-July
C	Marian College	Guest	Secondary – state integrated	March-December (est.)
C	St Bede's College	Host	Secondary – state integrated	March-December (est.)
D	Papanui High School	Host	Secondary – state	March-September
D	Shirley Boys' High School	Guest	Secondary – state	March-September
E	Catholic Cathedral College	Guest	Secondary – state integrated	March-July
E	St Thomas of Canterbury College	Host	Secondary – state integrated	March-July
Site	Site-sharing schools	Host-Guest	Type of School	Period Co-located 2011
F	Unlimited Paenga Tawhiti School	Guest	Secondary – state	March-Unknown
F	Discovery One School	Guest	Full Primary – state	March-Unknown
F	Halswell Residential College	Host	Special – state	March-Unknown
G	Breens Intermediate School	Host	Intermediate – state	March-April
G	Casebrook Intermediate School	Host	Intermediate – state	March-April
G	Heaton Intermediate School	Guest	Intermediate – state	March-April
H	Christ the King Primary School	Guest	Full Primary – state integrated	March-Early 2012 (est.)
H	Merrin Primary School	Host	Full Primary – state	March-Early 2012 (est.)

The second form of co-location is what we call 'shift-sharing' in this report. All of the shift-sharing schools are secondary schools. On these sites the guest school and the host school run as separate schools occupying the same physical space, but at different times of the day. Each school has more or less exclusive use of classrooms and other buildings and facilities during their 'shift'. The host schools all elected to take a morning shift, starting their school day up to an hour earlier than usual and finishing around 12.30pm-1.30pm, when the guest schools run their classes until around 5.30-6pm. In two cases (Marian College – St Bedes College and Linwood College – Cashmere High School) a separate temporary administration block of relocatable buildings was built for the guest school, and in two others (Papanui High School – Shirley Boys' High School, and Catholic Cathedral College – St Thomas of Canterbury College) the host school gave up either their hall block or library as a separate administration block for the guest school. In the other case (Burnside High School – Avonside Girls' High School) the guest school had use of offices and reception areas in the same block as the host school and more or less exclusive use of staffroom and other facilities during their particular 'shift'.

Duration of co-locations

The length of time that the schools have co-located to date has varied considerably. The intermediate schools, for example, site-shared only for several weeks over March-May 2011. Linwood College and Catholic Cathedral College returned to their home sites early in Term 3 (August), after approximately 4 months co-location, and Shirley Boys' High School returned to its site on 13 September 2011. The others are expected to remain co-located until at least the end of the 2011 year. Avonside Girls' High School is due to return to its former site at the start of the 2012 academic year, while Marian College has been told that it will remain co-located for the next few years, but that it will be co-located with Catholic Cathedral College on the latter's home site from the beginning of 2012. Unlimited Paenga Tawhiti and Discovery One schools are also likely to remain co-located at Halswell Residential College into the 2012 year. The long-term future locations of Avonside Girls' High School, Shirley Boys' High School and Marian College is uncertain at this stage.

The genesis of co-location arrangements

In some cases the initiative to co-locate came from personal contact between individual schools' principals, while in others it came in the first instance from approaches by the respective boards or by the Ministry of Education. In all cases, however, the final decisions to co-locate and which schools were to co-locate with which others, was made by means of negotiations among all of: the school principals concerned, the boards of trustees, the local office of the Ministry of Education, and, in the case of the state integrated schools, the schools' proprietors.

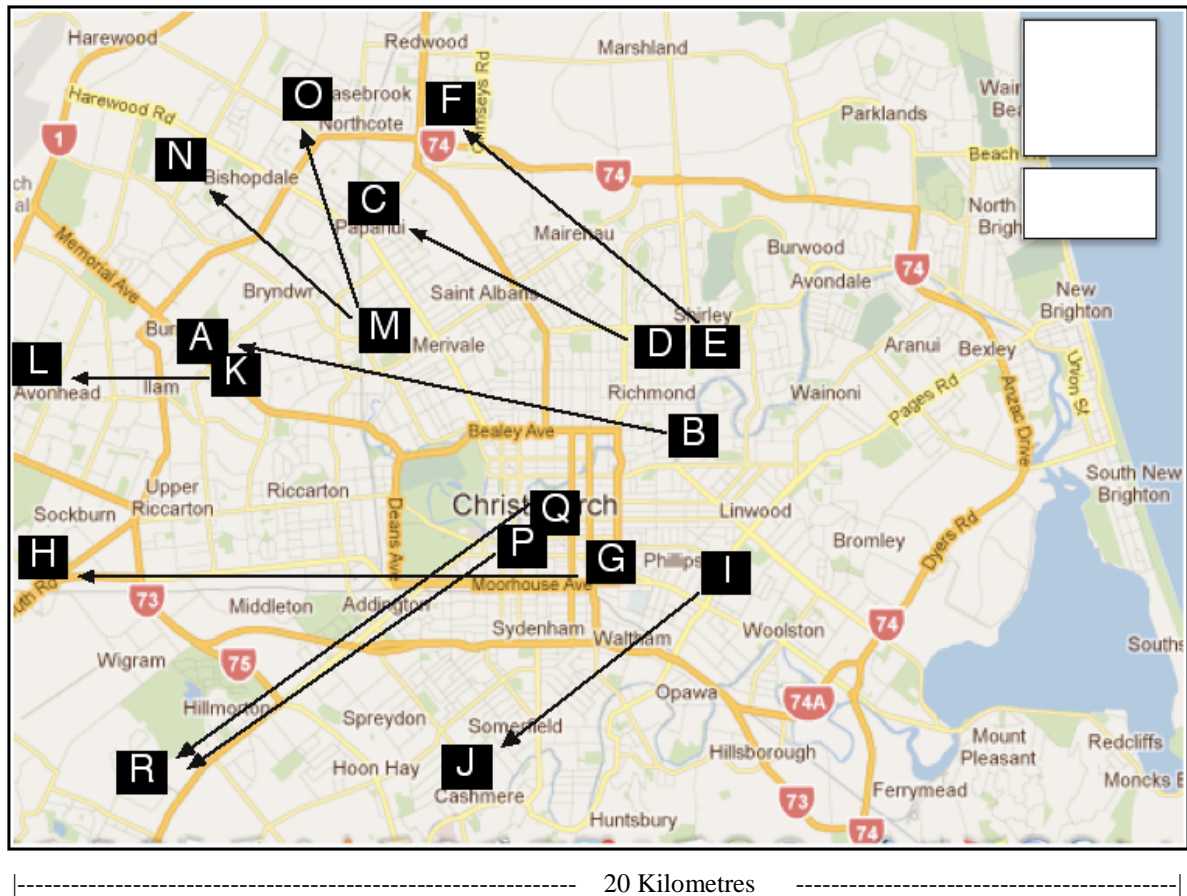
Key Ministry of Education roles throughout the period of co-location have been to manage the process of co-location at a strategic level, to provide emergency funding for property and facilities repairs and restoration, to liaise with schools over the mechanics and administration of the co-location process, and to manage information flow to and from co-locating schools.

With respect to the first of these roles, the Ministry established an 'earthquake response group' in the Christchurch Regional office to manage support for all of the earthquake-affected schools in Christchurch, including the co-locating schools. The group's initial priority was to coordinate the co-locations in order to ensure the schools were able to open for students within the timeframe set. It then focused on providing ongoing support for the co-located (and other) schools, and coordinating the cross-Ministry teams providing that support.

With respect to the other roles, the Ministry took direct management responsibility for the coordination and funding of the various property and service infrastructure needs of the co-locating schools (such as the provision or transfer of relocatable buildings, telephone and IT systems, toilet facilities, bus transport, and the like). Other Ministry support has included establishing a group of project managers to act as 'go-to' persons within the Ministry for specific co-locating

schools, allocating additional emergency staffing to assist schools to administer co-location, providing financial advice with respect to possible cost-sharing arrangements, and providing mentorship support for the principals.

Figure 1: Map of co-located schools



Key:

A. Burnside High School	G. Catholic Cathedral College	M. Heaton Intermediate School
B. Avonside Girls' High School	H. St Thomas of Canterbury College	N. Breens Intermediate School
C. Papanui High School	I. Linwood College	O. Casebrook Intermediate School
D. Shirley Boys High School	J. Cashmere High School	P. Unlimited Paenga Tawhiti
E. Marian College	K. Christ the King School	Q. Discovery One School
F. St Bedes College	L. Merrin Primary School	R. Halswell Residential College

The team of earthquake response project managers was made up at first of local officials and then additional experienced managers were brought in from other parts of the country. The out-of-town group remained in place to help manage the ongoing needs of the earthquake-affected schools. It was also a priority at the time of the study to assist those co-located schools whose properties have been cleared to return to their home sites.

The Property Division of the Ministry was responsible for management and funding decisions with respect to the property needs (buildings, land use, car parks etc.) of the co-locating state schools, while property management aspects for the integrated schools remained the responsibility of the proprietors of those schools.

Schools were encouraged and supported to develop their own memoranda of understandings with respect to the details of sharing of specific facilities and resources, and with respect to any cost-sharing arrangements for 'wear and tear' and

the like. The schools were told during set-up negotiations that each host and guest school was responsible for their own ongoing service provision and facilities sharing agreement with respect to their respective sites, but that no school, whether host or guest, should be either financially advantaged or disadvantaged by their co-location arrangements.

2.2 Arrangements made in site-sharing schools

Host: Halswell Residential College; Guests: Discovery One School and Unlimited Paenga Tawhiti.

Host: Merrin Primary School; Guest: Christ the King Primary School

Hosts: Breens Intermediate School and Casebrook Intermediate School; Guest: Heaton Intermediate School

For the 'site-sharing' schools, the common elements of their co-location arrangements included: they shared the same piece of land with their partner schools, they operated at the same time as their partner schools, that they retained, more or less, their 'normal', pre-earthquake daily timetables, and they had, for the most part, their own classrooms while sharing certain other specialised facilities such as libraries, gymnasium facilities, and so on. Nevertheless, each of the site-sharing combinations and arrangements were unique in their own way. Heaton Intermediate School, for example, was the only case of a school split between two host sites; Halswell Residential College – Unlimited Paenga Tawhiti – Discovery One was the only example of a primary school site-sharing with a secondary school; and Christ the King Primary School was the only example of a school that only sent some of its classes to another site, while the other classes stayed in usable buildings on their original site.

Governance, management and administration

Halswell Residential College is in the unique situation of site-sharing with *two* guest schools, one primary and one secondary. All three schools are special character schools, though the natures of their respective special characters are very different from each other. Halswell Residential College is a residential school set in a semi-rural environment catering for at-risk students from all over the country, whereas Unlimited Paenga Tawhiti and Discovery One are inner city, open-curriculum schools, working (until the earthquakes) from multi-story buildings in the Central Business District (CBD), and drawing extensively on the inner city itself as their key educational resource and community. Moreover, Halswell Residential College's governors are spread throughout NZ, unlike the other local schools, and as a consequence are not as 'hands on' as those of the two guest schools that they host. The roles and responsibilities of the Halswell Residential College principal significantly increased as he managed the many changes required by co-location.

The three principals at the Halswell Residential College site held regular (weekly) management meetings to coordinate management of the schools, and each school had its own staff meetings in the shared staffroom, though at different times. Office spaces for Unlimited Paenga Tawhiti and Discovery One were first established within the Halswell Residential College administration block, but they have since been moved to their own refurbished residences. The space also houses the sick bay, the photocopier and storage for records that have since been recovered from their respective CBD buildings.

Christ the King Primary School suffered substantial damage to many of its buildings on the 22nd February, but the land it occupies remained stable enough for classes for their younger students to continue. They lost seven classrooms, while their hall and another block of classrooms were yellow-stickered³. Initially the Ministry offered to house their students across several different sites as far away as Kaiapoi. However, the relieving principal, who had been the principal at Merrin Primary School, asked to be able to use Merrin Primary School's surplus classrooms. Merrin Primary School's classrooms were thus reorganised to accommodate five classes of Christ the King Primary School's senior students (Years 6-8). Merrin Primary School's and Christ the King Primary School's Memorandum of Agreement was settled early on, though the principals have made some adjustments to the details of the agreement to solve specific issues that

³ Yellow-stickered buildings have been assessed as dangerous, and require repairs before they can be used.

have arisen since. Christ the King Primary School has a deputy principal based permanently at Merrin Primary School, and the principal makes regular (at least weekly) visits to Merrin Primary School.

Heaton Intermediate School also split its management team between the two sites at which it was co-located. The Heaton Intermediate School principal and some support staff based themselves at Casebrook Intermediate School, while the Heaton Intermediate School deputy principal and some other support staff were based at Breens Intermediate School. The three principals met occasionally to coordinate some events, but for the most part ran their schools' academic programmes more or less independently of each other.

Grounds and buildings

As there was not enough physical space or buildings for all three schools (Halswell Residential College – Unlimited Paenga Tawhiti – Discovery One) to share the existing site, the host school (Halswell Residential College) reduced its student population from 90 to 36 students. Some neighbouring farmland was leased, thus allowing more space for relocatable buildings to be brought in, and providing a separate entrance for Discovery One. Halswell Residential College has reallocated some of its resourcing and staffing to support students in their home community

During the school closures immediately after the February earthquake, the Halswell Residential College students were all sent home, and when they returned they went off-site to Living Springs in Governor's Bay for a further three weeks. To promote a single campus culture Halswell took the decision, once back on site, to dress in mufti rather than their usual school uniforms, in order to lessen the visible distinctions between the three school student populations. The three schools are currently assigned separate play areas in the grounds, though the boundaries of these are not enforced and social contact in the common lunchtime is common.

The three schools shared the host's administration facilities. Since the new buildings came on site and existing buildings were refurbished, each school has been able to have its own office/administration space. They share common staffroom facilities. Each school's students have their own classrooms, but share use of some specialist facilities such as library, gymnasium, and cooking facilities. For Discovery One and Unlimited Paenga Tawhiti students, this division into formal classrooms stands in stark contrast to the open plan situation they had in their respective CBD buildings.

At the Merrin Primary School – Christ the King Primary School site, the two groups of staff share staffroom facilities, though there is a small space available for Christ the King Primary School staff to hold their own meetings. As was the case for the intermediate schools and the trio of schools at Halswell Residential College, The Christ the King Primary School students have their own general-purpose classrooms but share some specialised facilities such as the library. Co-located teachers from Christ the King Primary School teach their own classes in their own classrooms on the Merrin Primary School site and are bussed back to Christ the King Primary School's site once per week for whole-staff meetings. Merrin Primary School and Christ the King Primary School students share the school grounds at lunchtime without restriction.

For the intermediate schools, the host sites shared their staffrooms and staff workrooms with the guest school, dividing the office and administration areas into two sections. Breens Intermediate School, in particular, was keen to share all its resources and even sometimes called the combined school 'Breaton'. A community evening was arranged to which parents, students and teachers from both schools were invited. Each Heaton Intermediate School class was assigned a buddy class at Breens Intermediate School. A number of joint social activities for staff and/or students were held (staff masterchef, shared lunches, joint photos and staff meetings, and the like). A local church loaned rooms for music and choir and brought in cakes and food for the schools. The students shared the grounds on the same timetable, but, in order to discourage inter-school or within-school rivalries, a school-wide limit of no more than six students congregating together in the grounds was implemented.

Timetables

The timetables at all of the site-sharing schools remained relatively unchanged from their pre-earthquake situations. All managed close to the same number of teaching hours per week as before the co-locations, and retained more or less the same start and end times. The Heaton Intermediate School students adopted the timetables of their respective host schools, including common start and end times, as well as a common lunch break. Because the science laboratory at Breens Intermediate School was converted for use by Heaton Intermediate School, neither school was able to hold their science classes in a specialist room. Apart from a five-minute adjustment at the beginning of the day to allow for extra travel, Christ the King Primary School students likewise adopted the 'normal' schedule of their Merrin Primary School hosts.

Unlimited Paenga Tawhiti and Discovery One allow an extra half an hour in the mornings (to 9.30am) for students to get to the Halswell Residential College site, and compensate for that with a shorter lunchtime. For both Unlimited Paenga Tawhiti and Discovery One schools also, the day now ends more formally than before, with bus collections at 3pm. Previously these two guest schools, especially Unlimited Paenga Tawhiti, operated a timetable with glide-time built in at the beginning and end of the day, and a much more flexible timetable of formal classes and class times within the day. Their 'school day' now looks more like the traditional school day in other schools than it did pre-earthquake and pre-co-location.

Transport and travel

For all of the host site-sharing schools, students and parents made their own arrangements for getting students to and from school. In the case of the guest schools, however, the Ministry paid for buses for students to commute to their new school sites. Heaton Intermediate School and Christ the King Primary School students had buses from their home school site to their new shared sites, and the latter's student were bussed back to Christ the King Primary School once per week for chapel. Since their original sites are inaccessible in the middle of the CBD red zone, there is no central meeting place for Unlimited Paenga Tawhiti and Discovery One students to commute to Halswell Residential College from. Discovery One and Unlimited Paenga Tawhiti students either make their own way to the Halswell Residential College site, are given a lift by their parents, or, if they live on or near the route, catch one of two Ministry provided cross-town buses, one originating in Burwood and one in Northwood.

Teaching resources and equipment

The extent of sharing of teaching resources and equipment between guest and host schools varied from site to site. Most host site sharing schools adopted a 'what is ours is yours' approach to sharing resources. Two or three guest site-sharing schools 'came with nothing' and were for a few months unable to recover resources from their home sites in the central city red zone. On the whole, hard resources such as computers, data projectors, gymnasium and sports equipment, musical instruments and more expensive art equipment have been shared, while guest schools, where they could, have removed soft resources such as software, book sets, art supplies, task sheets and so on from their original sites and brought as much as they can to the new sites. For the most part, the host and guest schools have specified which resources are to be shared and which to be supplied separately in their respective memoranda of understandings. One of Merrin School's spare classrooms was being used as the new entrant classroom in Term 3, 2010, and this was made available with other spare capacity in the site to Christ the King. All of the Merrin Primary School resources have been shared with Christ the King Primary School. Note is taken of any expenses that Merrin Primary School incur and Christ the King Primary School has agreed to pay for these.

Unlimited Paenga Tawhiti and Discovery One students moved twice, firstly into Halswell Residential College and its residential areas, then into prefabs. During this time, neither school had chairs, tables, or teaching and learning resources. Halswell Residential College had bedrooms and chairs and tables, and books and learning materials for teenage boys with multiple learning needs. At the time of their interviews both schools had been allowed to 'enter and

recover' resources twice from the CBD, though we understand they have been able to do so several more times in the months since.

Likewise, the two host intermediate schools opened up their resource rooms to the guests and shared teaching resources.

Few changes were made in the site-sharing schools with respect to staffing ratios and extra academic support, although Heaton Intermediate School reassigned some specialist teachers (such as art teachers for whom there were no facilities) to mainstream core subject classes. This change provided mainstream class teachers with extra release time and opportunities to team teach.

Co-curricular activities

In the site-sharing schools, most extra-curricular activities have been able to continue as before, especially where they took place within the normal school day. Some cross-school cultural and sporting events were cancelled or curtailed but this has been a general effect of the earthquake on all Christchurch schools and was not confined to the co-located schools. All Wednesday afternoon sport was cancelled during the summer term, but in a couple of cases the site-sharing schools reported being able to organise inter-school events with each other as an alternative.

2.3 Arrangements made in shift-sharing schools

Host: Burnside High School; Guest: Avonside Girls' High School

Host: Papanui High School; Guest: Shirley Boys' High School

Host: St Bedes College; Guest: Marian College

Host: Cashmere High School; Guest: Linwood College

Host: St Thomas of Canterbury College; Guest: Catholic Cathedral College

Governance, management and administration

The distinguishing features of the shift-sharing schools are that they were all secondary schools, and that they each took a morning or afternoon shift as the main or only school on the host school site. The implementation of these shifts involved a move to significantly earlier, or later, start and finish times in the day for both host and guest schools. For both, it also involved a shortening or compression of the length of the school academic day compared to the pre-earthquake situation. In effect, the host schools occupied the site to run as a morning-only school, while the guest schools took over at what would have been lunchtime before, to become the site's afternoon-only school.

The initial inter-school approaches and decision-making about which school might co-locate with which seem for the most part to have rested with the respective school principals and their boards (and proprietors in the case of the Catholic integrated schools), negotiated at meetings facilitated or brokered to a lesser or greater extent in each case by the Ministry of Education. In deciding which school should partner with which other school, the various criteria or considerations at play included:

- the willingness of the respective principals and boards to offer or accept co-located status with each other.
- the relative sizes of the schools (host schools preferably being larger, or at least of a similar size to, the guest school).
- the distances between the guest and host schools and ease of transport from one to the other.
- an existing relationship between the schools (the principals of at least two guest schools had formerly held management positions in their host school, or the schools had a common proprietorship, for example).
- the likely compatibility of the respective school cultures, or the special character elements of the schools' cultures ('special character' affiliations in the cases of the Catholic state-integrated schools, for example).

- the presumed palatability of the partnership to the respective communities.
- the proprietorship of the schools (whether they were State owned or Catholic State Integrated schools, and so on).

The various ‘character’ combinations among the shift-sharing school sites are summarised in the table below. As can be seen, in all cases the host school had the larger roll, and the church-owned schools shared with other church-owned schools, but otherwise there are single sex schools sharing with co-educational schools, high decile schools sharing with low decile schools, and even a mix of proprietors within the church-owned integrated schools. Sheer practicability and the good-will and preferences of individual school principals and boards seem to have been the clinching factors determining most of the particular partnerships.

Table 2: Ownership, size, decile and school character elements of shift-sharing schools

Site	Shift-sharing schools	Host - Guest	Ownership	Roll July 2011	Gender	Decile
A	Burnside High School	Host	State	2,600	Coeducational	8
A	Avonside Girls' High School	Guest	State	1,081	Single sex girls	6
B	Cashmere High School	Host	State	1,712	Coeducational	8
B	Linwood College	Guest	State	875	Coeducational	2
C	St. Bede's College	Host	Catholic Marist Brothers	775	Single sex boys	9
C	Marian College	Guest	Catholic Bishop of Christchurch	418	Single sex girls	7
D	Papanui High School	Host	State	1,521	Coeducational	6
D	Shirley Boys' High School	Guest	State	1,355	Single sex boys	6
E	St Thomas of Canterbury College	Host	Christian Brothers	550	Single sex boys	8
E	Catholic Cathedral College	Guest	Catholic Bishop of Christchurch	327	Coeducational	3

All but one of the shift-sharing secondary schools were able to open in their co-located sites by 21 March. The other opened on its shared site a week later. The decision to co-locate was made rather later for this site than for the others. At this guest school, a commissioner was brought in to replace the board during the co-location negotiation period, and in order to assist the principal a transition manager (an experienced former principal in the region) was assigned specifically to manage the co-location for that school/site.

In terms of the internal management of co-location, especially in the set-up months, the shift-sharing schools used the extra staffing made available by the Ministry in several ways. One school had a transition manager assigned by the Ministry to focus on managing the co-location process. One other appointed an experienced manager to a part-time position to manage the myriad of administrative tasks involved. Most, however, spread the workload amongst their senior management teams, with the principal taking on the greater part of the key aspects of managing the co-location.

Grounds and buildings

Most schools in the shift-sharing group adopted a policy of minimal contact between the two schools' students and staffs. At most sites, therefore, students were to arrive and leave via different entrances to catch their buses, and were generally discouraged from socialising with each other during the transition times between 12.30pm and 1pm each day. Except at Burnside High School, where senior students stayed on for some afternoon classes in spare classrooms, shift-sharing school students had more or less exclusive use of classrooms and other specialist facilities such as gymnasiums art and music rooms, science laboratories and the like, during their shift. Several of the host schools also had one or two of their own buildings damaged and these were unavailable for either school throughout the period of co-location.

The respective arrangements made for the guest schools' management and administration teams, staff parking, and so on, have varied from site to site. At the Papanui High School site, the entire hall block was given over to Shirley Boys' High School to house its own separate reception area, administration offices, staffroom and staff workroom facilities. At Burnside High School, the Avonside Girls' High School management team were allocated offices scattered through the Burnside High School administration block, and both schools shared the same reception/administration area. Burnside High School also had part of its grounds redeveloped as a temporary car park for Avonside Girls' High School staff, with their own separate entrance to the school and security lighting installed. At both the Burnside High School and the St Thomas of Canterbury College sites, both groups of staff were able to share the host school's staffroom. At the St Bedes College site, Marian College senior and office staff were provided with three rooms in the Performing Arts Centre. In the beginning, Marian College staff used a kitchenette and corridor in the Performing Arts Centre as a staffroom. At both schools, relocatable buildings were put on-site for use as a staffroom and as office facilities for administrative staff.

Timetables

Significantly changed timetables and different times for classes within a compressed school day compared to the pre-earthquake situation, are distinguishing features of the shift-sharing sites. In every instance, the host school elected to take the 'early' shift, beginning their school day up to an hour earlier than usual at new times ranging from 7.45am-8am, and finishing at what would have normally been their lunchtime (c.12.30pm-1.30pm). The guest schools, therefore, began their school day at around 1pm-1.30pm, finishing between 5.30pm and 6pm, depending on the site.

The compression of the school academic day was achieved by a combination of: fewer breaks (usually only one 15-20 minute break per day), no formal lunchtime, reduced times for form times and assemblies, the loss of one 'period' of subject classes per day, and the reduction of class period length from an average of 50-60 minutes each to an average of 40-45 minutes each.

Table 3: The daily timetables of the two shift-sharing schools on one co-location site

Morning/Host school Monday-Friday	Afternoon/Guest school	
	Monday-Thursday	Friday
Period 1 8:00 - 8:40am	Period 1 1.15 - 2.00pm	Period 1 1.15 - 2.00pm
Period 2 8:40 - 9:25am	Period 2 2.05 - 2.50pm	Period 2 2.05 - 2.50pm
-----	Period 3 2.55 - 3.40pm	Period 3 2.55 - 3.15pm
Form time 9:25 - 9:35am	-----	<i>(Assembly for some Houses)</i>
-----	Break 3.40 - 4.05pm	-----
Period 3 9:35 - 10:20am	-----	Break 3.15 - 3.40pm
Period 4 10:20 - 11:05am	Period 4 4.10 - 4.55pm	-----
-----	Period 5 5.00 - 5.45pm	Period 4 3.45 - 4.30pm
Break 11:05 - 11:30am		Period 5 4.35 - 4.55pm
-----		<i>(Assembly for other Houses)</i>
Period 5 11:30 - 12:10pm		Period 6 5.00 - 5.45pm
Period 6 12:10 - 12:55pm		

Burnside High School was the only co-located school that was able to retain a near normal number of weekly teaching hours, at least for its senior students. Because it is so much larger than Avonside Girls' High School, Burnside High School was able to extend its school day for senior students to include two afternoon timetable slots, using spare classroom capacity that Avonside Girls' High School classes do not occupy. For Burnside High School's Year 12 and 13 students, classes have therefore continued into the afternoon, finishing at 2.30pm on most days. In term 3, some of these timeslots and classes have also been made available for Year 11 classes, alternating on different days with Year 12 classes. Burnside High School starts half an hour earlier than before, while other host shift-sharing schools start up to an hour earlier. Burnside High School's juniors have no lunchtime but its seniors do, before their afternoon classes.

Several schools have 5-minute transition times between periods, but others do not. After trialling the shorter periods for a while, at least two of the schools have created double periods for some of its practical classes to give enough time.

During the 2011 school year, all Christchurch schools were closed for approximately three weeks, due to the disruption immediately following the February earthquake and as a result of snow during July. Due to compressed school days during co-location, students at shift-sharing schools received less class time than other students.

Academic support

In part as an acknowledgement of this loss of teaching time, and in part to provide opportunities for continued study out of the new school hours, the Ministry set up eight study centres around the city to operate for at least terms 2 and 3. All the centres were to be open in the mornings for use by the guest schools' senior students, and some were open in the afternoons as well. Study centres were set up primarily with Years 11-13 students in mind, and were equipped with desks, computers and internet access. The centres were staffed part-time by qualified teachers. Some of the study centres were established in relocatables or other spaces inside or adjacent to particular co-located schools' sites, while others were based in public libraries and other clubrooms-style facilities in the same or a nearby suburb.

Most of the shift-sharing schools reported a reduction in some areas of academic activity in addition to the reduced time in a shortened day. Several said they had cancelled or had reduced the time of academic field trips and the like, and no longer offered specific library times because library facilities in several schools were unavailable. On the other hand, a number of the co-located schools, both host schools and guest schools, also reported making their own extra provision for out-of-class-time tuition and study for their students. Shirley Boys' High School, for example, has been able throughout to offer some voluntary morning tuition classes for seniors. Similarly, Burnside High School holds scholarship tutorials at lunchtime if there are available rooms, and St Bedes held some tuition sessions on study skills for its juniors early in the co-location period.

Marian College has throughout had about 65-70 girls attending morning classes at St Bedes, in addition to their afternoon classes as Marian College students. Similarly, some St Bedes students have been able to attend afternoon classes with the Marian girls in option subjects not previously offered by St Bedes. Because St Bedes were unable to offer food technology facilities, the food technology students from Marian College have been commuting a couple of times per week to 'after-school' classes at a third school, Mairehau High School. St Bedes also had a significant number of boarders on site. During the summer when sports were not on, they ran a special study programme for these boarders in the afternoons. Now that winter sports are available the boarders do sports in afternoons.

At least three of the schools said they offered NCEA assessment opportunities in some morning/afternoon timeslots if rooms were available, and some staff offered informal tuition to students in their morning or afternoon out-of-class time.

Transport and travel

In all host shift-sharing schools, students made their own daily travel arrangements but travelling to school up to an hour earlier than before and leaving up to two hours earlier in the afternoon. For the guest/afternoon schools, the Ministry organised free buses to run from their original school sites to the new host school sites at lunchtime, returning back to the home school sites after school at c.5.30-6pm. This meant that both host and guest school students commuted at least one way in the dark during the winter months. Most of the afternoon schools established a routine of staff or senior students riding the bus routes in order to monitor student behaviour, and some provided safety equipment (high-viz vests, torches, etc) for students, and/or hired security guards to escort students to and from their buses. At one afternoon school, a local church community provided a free lunch for travelling students at the home school site, prior to their departure for the new school site.

Pasifika staff at two schools ran a door-to-door van service for Pasifika students in the eastern suburbs who were having difficulty getting across town to their new sites.

One school reported some issues with bullying on the buses at first, and so they introduced a colour-coding system where some students were given more supervision. The school has paid for security guards to meet the students at the home site and manage the drop-off. Teachers and support staff also travel with the students and ensure that nobody is left at the school. They introduced a 'school bucks' system whereby good behaviour on buses was rewarded with a school currency that can be used to bid on prizes at the end of the co-location period.

Teaching resources and equipment

The extent to which teaching resources were shared between host and guest schools has varied significantly from site to site, and between subject departments. Due to Catholic Cathedral being located in the red zone, staff arrived 'with nothing', not even their laptops. However, St Thomas of Canterbury College's 'our place is your place' approach meant that its teachers opened their resource room to the Catholic Cathedral teachers and allowed them free access, gave them units of work and so on. Staff at the school also reported they were engaging with the other school's staff to do some cross-moderation, cross marking and other collaboration around teaching activity. Burnside High School set aside one block of classrooms specifically for Avonside Girls' High School's teaching resources, which included, after a while, their computer suites transferred from their home site.

Across the shift-sharing schools, resource sharing seems to have been greater in practical subject areas with specialist equipment, such as science laboratories, art materials, gymnasium facilities and so on, but there were also instances reported of individual teachers and other departments sharing both hard and soft resources with their colleagues from the other school. The inaccessibility of several guest schools' home sites meant that teachers had to rely completely on the resources they had on their own laptops in the first few weeks of co-location. There were also instances reported of guest school teachers frequently 'shuttling' resources from their damaged buildings on their home sites to their classes on the new site, and of 'working out of our car boots' for the first couple of months. One guest school provided its staff with wheeled cases to carry their resources between classes on the new site.

As in the site-sharing sites, the host schools have tended to provide most 'hard' resources, while the guest schools have gradually, over time, brought materials from their home sites to the new sites. As in the site-sharing schools also, the specifics of cost-sharing for wear and tear on the host school's plant and buildings has, as well as the specifics of equipment collection processes, care, storage and maintenance of shared specialist equipment, has been agreed by negotiation between sharing schools or departments.

Some host schools also noted that they too had lost some specialist rooms in the earthquakes. Not all science laboratories and music suites, and the like were available to share, and in several schools their libraries were out of commission, either through earthquake damage or because it was being used for other purposes as a result of co-location.

Co-curricular activities

The compression of the school day in shift-sharing schools meant that many cultural activities such as school music and drama performances, lunchtime clubs, kapa haka groups, and so on, were cancelled or curtailed, especially in the first few months of co-location, and especially for the afternoon schools. Apart from the time when all inter-school sport was cancelled in the city because of the quakes, and perhaps because sport is often less dependent on rooms being available, much sports activity has continued in the shift-sharing schools, although at a reduced level. Morning schools often retained optional sports practices on their own playing fields in the afternoon, while one or two afternoon schools were able to provide sports practices in parks and reserves in alternative locations during the mornings. Shirley Boys' High School, for example, had sponsorship from some local business for transporting students to practice fields around the

city in the mornings. At Burnside High School those juniors doing afternoon sport leave the school at lunchtime but return for practise later in afternoon. St Bedes College, Avonside Girls' High School and St Thomas of Canterbury College also all reported maintaining as much sport as is practicable in the morning/afternoon timeslots available, and that they have been still able to send teams to at least some scheduled national tournaments, and the like.

As for other co-curricular activities, these were often cancelled in the first few months of co-location, although most schools have made efforts to re-establish them over time. For example, at Linwood College, the school social was cancelled but regular house activities and school assemblies have been retained. Activities such as robotics, the orchestra, kapa haka, Pasifika culture programmes and the school musical were also retained, and their orchestra trip to the United Kingdom went ahead. Students from one school told us that their school council has not been very active, but practice for a school production has continued in the afternoons. Similarly, St Thomas of Canterbury students told us that the kapa haka group, which used to run at lunchtimes, is now being run during a normal scheduled period and at morning tea time. At St Bedes College, the Year 13 leadership retreat was reduced from an overnight to a single morning and feast days have been shortened.

Even though at all the shift-sharing schools the general school policy has been to minimise contact between guest and host school student populations, there have nevertheless been some joint social, academic and sports collaborations between host and guest school students. Students at several sites spoke of joint meetings of senior students or combined student council meetings. Burnside High School and Avonside Girls' High School students are considering combining their two concert groups, producing a Year 9 interschool production, and they also held a joint 'red and black' day.

Summary

Co-location arrangements

Broadly, there have been two forms of co-location operating in the co-located school sites. For convenience we refer to 'site-sharing' as the arrangement made in several cases whereby two (or in one case three) schools operated on a single site at the same time. In the 'shift-sharing schools' (all secondary schools) the 'host' school operated on the site in the mornings and the 'guest' school operated in the afternoons.

In the shift-sharing sites the normal school day was compressed to be up to two hours shorter than normal, with the morning schools starting up to an hour earlier and the afternoon schools finishing up to two hours later than normal.

Ministry of Education funded bus services were arranged to transport guest schools' students between their former school site and their new co-located site at the beginning and end of each school day.

The extent of sharing of facilities, teaching resources and equipment between guest and host schools has varied from site to site. At most sites, additional, relocatable buildings have been brought in to accommodate guest schools' administration and office blocks and some classrooms. Many host site-sharing schools adopted a 'what is ours is yours' approach to sharing resources, while at the shift-sharing (secondary) schools resource sharing has varied more on a department-by-department basis.

On the whole, in both site-sharing and shift-sharing schools, hard resources such as computers, data projectors, gymnasium and sports equipment, musical instruments and more expensive art equipment have been shared, while guest schools, where they could, have removed soft resources such as software, book sets, art supplies, task sheets and so on from their original sites and brought as much as they can to the new sites. Negotiating arrangements for sharing the cost of wear and tear on the host schools' plant and resources has been problematic at several co-location sites.

At most shift-sharing sites, and at one of the site-sharing sites, the schools tried to keep social contact between the two student bodies to a minimum, and in most, but not all sites, there was relatively little interaction between teaching staff from each school.

3. The impacts of co-location on schools, students, staff and parents/whānau

3.1 Introduction

The first section of this report outlined the arrangements made at the various co-location sites, and how both site-sharing and shift-sharing schools have organised and managed their respective co-locations to date. This second section focuses on the experience from the schools' and Ministry's perspectives, and the extent to which such arrangements have been problematic or enabling for schools. In this section we identify student, parent, staff and stakeholder perspectives on co-location with respect to five main areas:

- school governance and crisis management
- family life and daily routines
- curriculum delivery, teaching approaches and student outcomes
- staff' and students' social and professional relationships at school
- schools' identities, cultures and community connections.

3.2 School governance and crisis management

The regional office of the Ministry of Education has played a pivotal role in the establishment of the co-located sites, and in supporting their ongoing management. The extent to which the Ministry initiated co-location agreements seems to have varied from site to site, but it has clearly played an important role in brokering several of the co-location agreements, especially for the primary and intermediate schools and for some of the secondary schools, as well as supporting the individual initiatives of principals and boards in the others.

In analysing their own experience of facilitating the co-location of earthquake-affected schools over the four months after the February earthquake, Ministry officials noted the following in particular:

- The need to update the disaster recovery plan, and guidelines (both within the Ministry and in individual schools) drawing on the lessons learned from what has been an unprecedented and largely unplanned-for situation. A Ministry manager said that they are currently putting together a pack of information and copies of various documents that could be the makings of a 'tool-kit' for co-locating schools in the future. This could include templates for disaster recovery plans for schools.
- Acknowledgement that blurred boundaries can sometimes occur in emergency situations, between the Ministry and devolved local (school) powers and responsibilities. This involved both tensions between regional Ministry and national office, and also decisions about what the Ministry as the prime funder and policy maker was responsible for, and what individual 'self-governing schools' were responsible for in a devolved school governance system. They reported some lack of clarity in both the Ministry and in the schools, about what constitutes special *ad hoc* disaster recovery efforts implemented under emergency powers, and what could be regarded as 'business as usual' in the management and governance of co-located schools.
- Recognise the importance of being consistent in the 'key messages' given to schools throughout. There is a perceived need for a single point of liaison for co-locating schools at the local Ministry office, both in order to

provide ease of communication between schools and the various Ministry officials responsible for aspects of co-location and disaster recovery, and to avoid ‘contradictory messages’ being given to schools by different parts of the Ministry.

- The need for extended delegated authority to be given to regional offices in such emergencies, and the value of both ‘rapid response’ on the one hand, and ‘local knowledge’ of the circumstances of individual schools and their often very different and unique needs in such situations, on the other. However, the Ministry team also acknowledged that the team members from out-of-town were able to bring a more objective perspective and some ‘emotional distance’ to the situation.
- The value of giving attention and priority to relationship building on a personal level, and the value of ‘people skills’ in situations of high emotional stress and uncertainty.
- The value of communicating constantly with each other and with schools and their communities, ‘even if the news is that there is no news’. Some parents felt that while relevant information was held on the Ministry website it was often difficult to find, or did not include links to school sites where more detailed or appropriate information was to be found.

Other things that members of the Ministry team said they would consider if it were to happen again include: appointing a specific ‘transition manager’ to each co-locating school partnership to broker the relationship between the two schools and to take some administrative pressure off the principals; providing management support for the schools as they *re-*locate back to their home sites when co-location ends; and using a wider variety of communications methods in dealing with the schools and the public.

The co-located schools highlighted many of the same issues as above. In particular, they emphasised from their perspective the importance of rapid rather than delayed or slow decision-making, consistency in ‘key messages’ emerging from the Ministry, clarity around the division of powers and responsibilities of schools versus those of central government, and maintaining continuity in the flow of communication. One principal spoke of the ‘indecent haste’ with which she felt that the co-located schools had been pressured to open, while others reported feeling frustrated at what they regarded as unnecessary delays in decisions in relation to some property issues, and some apparent reversals of local decisions made when referred to national office in Wellington.

On the other hand, the principals generally appreciated the assistance that the Ministry provided with respect to negotiating and establishing the co-locations, and its responsiveness in the initial stages when schools were trying to re-open. They also spoke favourably of the staffing assistance provided and the provision of an experienced ex-principal to act as a support person for the co-located schools principals as a group. Several principals said that they would find some official ‘guidelines for co-locating in an emergency’ useful in the future, and several also suggested that some form of template for cost-sharing arrangements would have made those particular inter-school negotiations easier. At the time of the study most schools had finalized their co-location agreements, but a few had not and said that cost-sharing, especially for wear and tear, had been a particular source of tension.

3.3 Family life and routines

The effects of co-location on the family lives of staff, students and parents/whānau were often little differentiated in people's minds from the effects of the earthquakes in general. Overall, these effects on family life that were attributable to co-location, were identified as greater for the families of guest schools than host schools, and on the whole greater for the communities of shift-sharing school than those of site-sharing schools.

In the interviews and survey alike, there was relatively little family disruption attributed directly to co-location for those in the co-locating primary and intermediate schools, probably because their daily timetables have remained more or less the same as before. In fact, in the intermediate schools, when identifying potential areas of tension such as anxiety about children being further away, several parents qualified this by saying that they saw the experience as generally a worthwhile one for their children, and that the social lessons learned from having to adapt and take care of others in society could be just as valuable as academic learning. In the survey 85% of students, 91% of parents, and 94% of staff in site-sharing schools who responded, said that their family relationships had either not changed or had improved as a result of site-sharing.

Those disruptions to family life that were mentioned in either the interviews or the survey came mostly from students, staff and families in shift-sharing schools, and were related to the effects of the earlier/later start times and the compressed school days experienced in those schools. It has taken time for students, staff and families to adapt to the new timetables as 'the new normal' in their daily routines, and for many, this aspect of co-location has added throughout to their general sense of the disruption of the times. For most students in the shift-sharing schools, the changes in timetable routines have meant a shorter formal school day, (though for a few it has actually meant a longer one), and much more non-school time in the mornings or afternoons than before. It has meant early departures to school in the morning for host school students and staff, and late arrivals home in the evening for guest school students and staff.

Whilst it has caused some disruption to family life I am not getting a lot of grizzles from parents. People seem OK with it." (Principal, host school)

Hardly any family time after school, but his excitement of coming home from school earlier than usual was good. (Parent, host school)

Mother of one child regular school hours and one student attending [guest school] (afternoon shift) Family life hugely affected. Financial strain huge. Colleges and management extremely supportive thank goodness! (Parent, guest school)

I have found site sharing really difficult myself as a parent. ... I don't see my daughter in the morning before I leave for work, ... She gets home at 6.30 in the dark. ... Our family life has been greatly disrupted. The school day is long - with only a short break in the afternoon. It is very hard for the girls to concentrate and take in new information after 4pm. (Parent, guest school)

I prefer the shorter days and I feel lunch's/breaks are currently too long. I would like if the days were shorter and we had the option to stay in longer if we needed. (Student, host school)

The early start has worked really well for us a family. ... He has also been taking himself off to bed earlier. (Parent, host school)

The great majority of students, parents and staff in shift-sharing schools said that their family life had changed little as a result of co-location. Ninety-one percent of students, 84% of parents and 76% of staff at shift sharing schools said that their family relationships had either not changed or had improved as a result of site-sharing. Among those who said that their family life had been adversely affected, students, parents and staff at guest/afternoon schools were all more likely to report this than those at host/morning schools. The group most adversely affected seems to have been staff at guest/afternoon shift-sharing schools. A quarter of survey respondents in this group said that co-location had affected their family life for the worse.

Table 4: Effects of co-location on family life**As a result of the co-location our family relationships have:**

	Students		Parents		Staff	
	Site-sharing	Shift-sharing	Site-sharing	Shift-sharing	Site-sharing	Shift-sharing
Changed for the better	5%	9%	9%	10%	34%	7%
Not changed	80%	82%	82%	74%	60%	69%
Changed for the worse	15%	9%	9%	16%	6%	24%
n=	1022	4404	344	1165	62	277

	Students		Parents		Staff	
	Host school	Guest school	Host school	Guest school	Host school	Guest school
Changed for the better	11%	6%	12%	7%	11%	6%
Not changed	86%	80%	78%	76%	79%	62%
Changed for the worse	4%	14%	10%	17%	10%	32%
n=	5,454		1,559		551	

Similarly, the extent to which the timetable changes were felt to be disruptive also varied little among individual schools, but varied significantly between host and guest school communities. Over half of staff, students and parents at shift-sharing schools who responded to the survey reported that they were 'satisfied' or 'very satisfied' with the change in the timing of the school day, while a fifth of staff and students, and a quarter of parents respectively reported being 'dissatisfied' or 'very dissatisfied', the rest being neutral. Staff, parents, and especially students, at guest schools were all more likely to report being 'dissatisfied' or 'very dissatisfied' with the changed time of day than staff, parents and students at the host schools. In other words, the morning shifts were seen as much less disruptive to daily routines and family life generally than the afternoon shifts.

As to the nature of the effects of co-location on family life, most related to either the students early departure or late arrival for family time and meals, or to the consequences of having children at home for more time during the day. Several staff and parents mentioned some disruption to their family routines where there were young children in the family, or younger children at home during the working day, and the adjustments they have made with respect to employment, childcare and transport as a result.

Table 5: Satisfaction with changes to the start-end times of the school day**Q9. How satisfied are/were you with changes to the start-end times of the school day? (Secondary only)**

	Students		Parents		Staff	
	Site-sharing (Sec)	Shift-sharing	Site-sharing (Sec)	Shift-sharing	Site-sharing (Sec.)	Shift-sharing
Very satisfied	5%	24%	35%	18%	4%	20%
Satisfied	20%	26%	44%	34%	4%	35%
Neutral	60%	30%	5%	19%	59%	13%
Dissatisfied	11%	13%	3%	21%	33%	23%
Very dissatisfied	5%	7%	13%	8%	0%	9%
n=	86	4759	36	1197	16	295

There were also many concerns expressed around their children's safety going to or from school in the dark, and being at home alone during the working day. Several parents mentioned changing their working hours so they could transport or look after children during the day. Others talked of a loss of quality family time, seeing much less of their children when they were often leaving for school before other members of the family in the morning, or arriving home, in some cases, after dinner at night. A few of the students interviewed talked of the negative impacts. One student said he had to get up at 6.30am to bus into school, but because of work and sports training after school he was not getting home till very late and was losing sleep as a result. Several others said they were arriving at school more tired than before. The Principal of one afternoon school reported that one girl left the school specifically because she had to keep her afternoon job to be able to support the family, and that six others had left because of the afternoon start and/or parent anxiety about leaving their daughters 'at home alone in shaky houses during the day'. The negative effects of timetable changes seemed to be felt much more by the families of guest/afternoon shift-sharing schools than those in the host/morning schools, and among those out-of-zone students who now had much further to travel to and from school.

On the other hand, many students and parents, mostly from host/morning schools, also said they *liked* the new routines and times. Several parents at the interviews said that it was easier getting their children out of bed and off to school in the morning, even though the changed bus timetables still caused problems for a while. One student from a morning school said he felt that, overall, family dynamics had improved at home, and that dinner times were now more relaxed. Many of the morning school students also reported that they liked the early finishes. 'It is great', said one, 'because we can do what we want in the afternoon'. Others mentioned the benefits of being able to complete homework in the afternoons, thus freeing up their evenings, and of much more free time to meet friends and socialize in non-school time. Still others felt they were paying more attention in class in the mornings and they were less tired at the end of school when it finished at 1pm. One student said he liked finishing at lunchtime as then he could be home and get whatever he wanted to eat, while another said he liked the early finishes because he could go down to the skate park and have exclusive use of it before the primary school students finished for the day. Several of the morning shift students said they felt sorry for the students at the afternoon schools as they have to wait around in the mornings and start their concentrated work when the day was already half over.

Students' use of non-school time

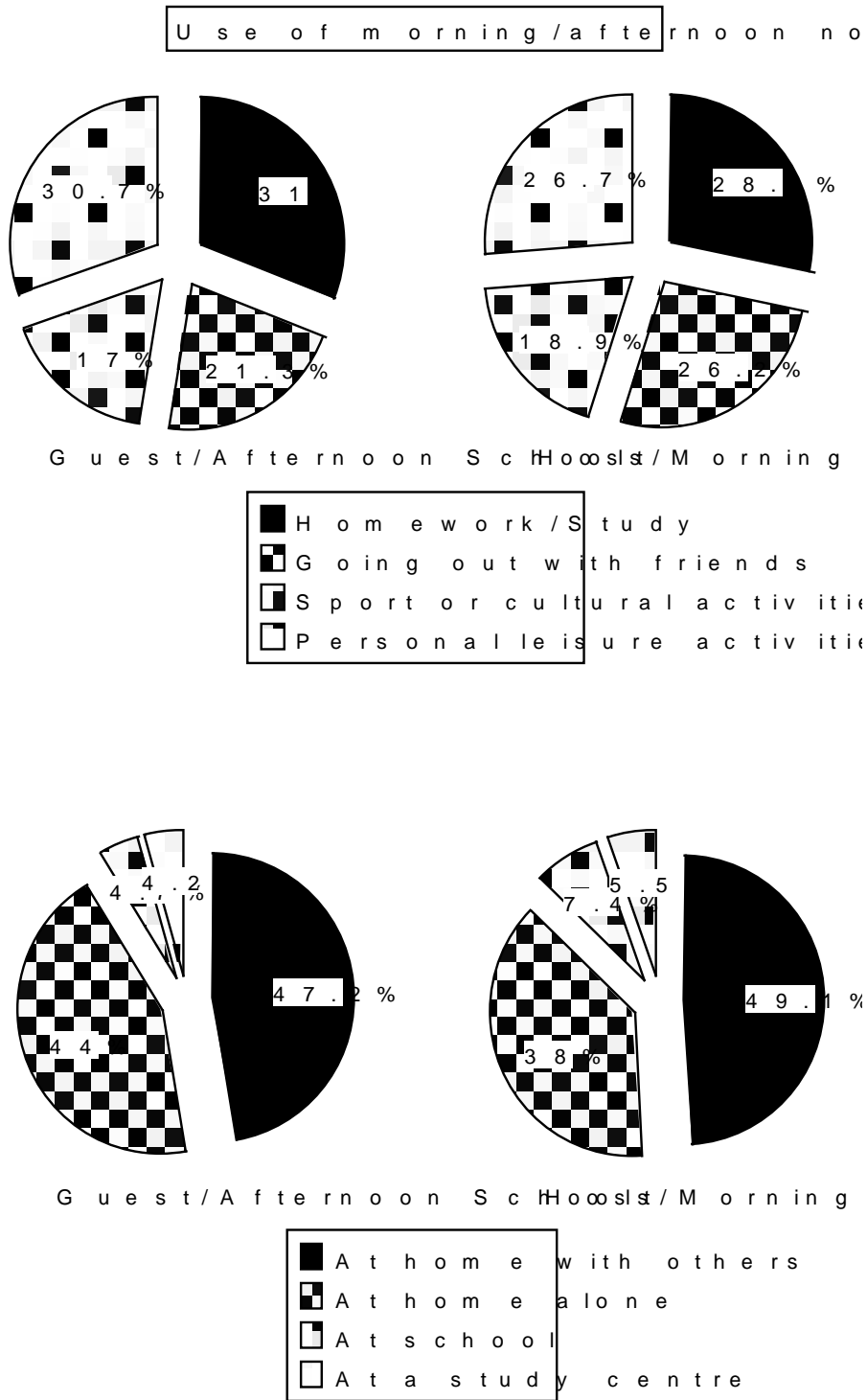
The lack of a lunch break in nearly all shift-sharing schools, and the late arrival home in the evenings, meant that eating patterns both at school and at home were often disrupted. The long periods of the day, either mornings or afternoons, during which students were 'left to their own devices' was also a cause of concern, especially for parents who spoke of child-care arrangements being disrupted and concerns about student being out in the community, visiting local malls, and so on, during this 'down time'.

When asked how they mainly spent their respective mornings or afternoons, students in the shift-sharing (secondary) schools mostly responded with 'doing study/homework' or 'personal leisure activities'. Seniors seem more likely to have reported doing these than juniors, while juniors seem more likely to indicate that they spend a good part of this time socialising with friends. Several students said that an increased homework load under co-location meant that they were not having the 'spare time' in the mornings/afternoons that they had anticipated. The other major activities both groups engaged in were sports or cultural activities. Around 80 St Bedes College and Marian College students spent their mornings or afternoons in lessons at their respective partners' schools.

In the survey responses there are no clear differences between the out-of-class activity preferences of students at the host/morning schools and those of students in the afternoon/guest schools. However, girls appear to be more likely to report spending their non-class time doing homework/study than boys, while boys were marginally more likely to report spending their time on sport and cultural activities than girls. Both genders reported spending similar amounts of time to each other on personal leisure activities and going out with friends. Among the 'other' activities identified, catching up

on sleep was prominent, especially among the afternoon school students. Students and staff at Marian College said that senior students often attended the study centre on site in the mornings, but that this was often in order to socialise with friends rather than necessarily to ‘knuckle down and study’.

Figure 2: Students’ reported use of morning/afternoon non-class time in shift-sharing schools



As to *where* they spent their non-classroom time, 45% of students who responded to the survey reported being often at home alone, and 53% of them reported being often at home with others. Girls seem more likely to have been at home with others than boys. There were no clear differences between students at host/morning or guest/afternoon schools with respect to *where* they spent their out-of-classroom time. Staff at two of the guest schools said that at the beginning there were problems with students hanging around the local Malls in the morning and then again late at night, but that this has improved as time has gone on.

Staff

Reported effects on the family lives of staff at co-located schools were similarly mixed in nature. While the students in shift-sharing schools tended to spend their respective mornings or afternoons at home, their teachers tended to spend that time at school. Seventy percent of teachers who responded to the survey stated that they ‘mainly’ spent their non-classroom time at school, with 53% of them also often spending it at home. Lesson preparation, marking and school administration or attending school meetings were the most reported activities that teachers spent their non-teaching day doing. Several of the teachers in interviews said that their daily work pattern had changed in that they were now doing at school during an extended working day a lot of what they had previously done at home after dinner at night.

Loss of teaching time has meant all day devoted to daily teaching and admin moved to afternoon so day is actually longer with more work taken home. (Teacher, host school)

It wasn't site-sharing itself that was the problem - no issues with space or the people of the other school. It was time - short lessons + no breaks. Absolutely draining. (Teacher, host school)

Several staff at an afternoon school said that they were not getting any time to spend with their families in the evenings, and one teacher with young children said that she does not get home from school until after her children are in bed. One staff member at a morning school, on the other hand, said he now had to leave for school before 7am, leaving his wife to deal with their young family, which put pressure on at home. Similarly, a teacher in charge of organising relievers at a morning school said he now often disturbs his family with phone calls as early as 6.15am to arrange relief for teachers phoning in sick. Many staff reported that they were actually at school for longer under co-location than before, as they were spending most of their mornings or afternoons at school in addition to their teaching times, and that their own daily timetable had got ‘out of kilter’ with that of the rest of the family: “There’s very little ‘down time’. No ‘you time’... and reduced family time. Other family members are still working to normal timetables and other teaching friends [have] different timetables to you.” (Teacher at a guest/afternoon school). As a principal from an afternoon school said, ‘It’s a misconception that staff work shorter days. They’re longer.’ Several other principals, and many of the staff we interviewed, agreed.

Commuting patterns

Co-location has also meant significant changes in the travel patterns of many students, staff and parents alike, especially in the shift-sharing schools. Parents and staff in many of the schools reported that they were transporting their children to school themselves more often than before, that students in guest schools were spending a much greater amount of time commuting (and travelling greater distances) than before, and that, for the guest schools in particular, transport and travel had become a major issue for families.

For site-sharing schools commuting patterns generally remained the same as before co-location. Students at guest schools get to their home site as before, and then catch the buses provided to the host sites. Exceptions were Discovery One and Unlimited Paenga Tawhiti, where the distance between many homes and the schools meant that commuting times and transport arrangements changed significantly for many of their parents and students.

Many parents, at both host and guest schools, said they were now taking their child to school themselves more than before. One parent of a Burnside High School junior student, for example, said that their child comes home for two hours after school finishes at lunchtime, before being taken back for sports practices at 2.30pm, so they ferry him

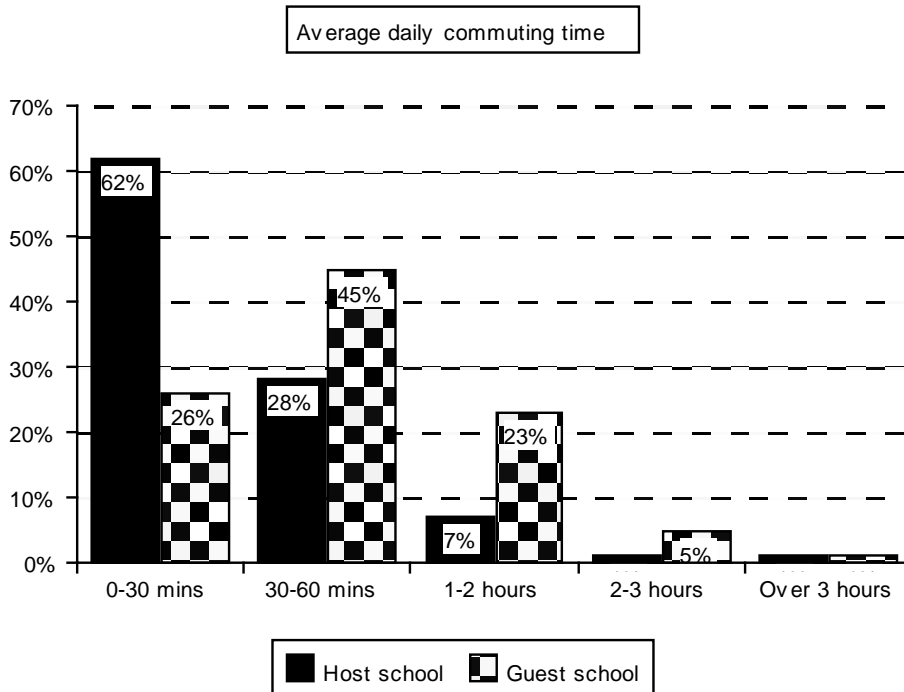
around more during the day as a direct result of co-location. Parents of out-of-zone students at Shirley Boys’ High School, Burnside High School and Avonside Girls’ High School spoke of organising car pools with other parents because the school bus routes were inconvenient or the timetable no longer suited them. Some parents also spoke of taking their children to school themselves more often because of safety concerns around their children cycling when it is dark at night and/or frosty in the mornings. In several instances, parents we spoke to have children at more than one co-located school, and so have to cope with transporting them much greater distances to the two new school sites. In the early days, especially, quite a few students and parents reported being late for school or late home because either the buses were full and did not stop, or because the public bus timetables were not well coordinated with the school day any more. The problems with the bus timetables and routes have reportedly become less over time.

This required a job change so our son didn’t spend 4 hours a day travelling, (Parent, host school)

Initially had transport problems as school buses did not go to New Brighton. After pressure on bus co & school this was corrected in the second term at the shared site (Parent, guest school)

Whether site-sharing or shift-sharing, by bus or by car, staff and students at guest schools reported that they are commuting much longer than before. While only 9% of students at host schools who responded to the survey said that their total daily commuting time was more than an hour, 30% of students at guest schools reported that their daily commuting time was over an hour. For many of the latter, their commute is in two or more parts: first, the travel from home to their home school site, and then the bus trip from their home school site to their new school site. For many, too, daily travel also includes a further trip to a sports practice or the like, either before or after their school day. Poor road conditions as a result of the earthquakes were also said to have increased travel times for students from the eastern suburbs, even those from host schools.

Figure 3: Students’ daily average travel time to co-located schools



Not surprisingly, perhaps, family transport and commuting patterns were found to be much more disrupted by co-location among the students, parents and staff in the shift-sharing schools than in the site-sharing schools, particularly those from the guest/afternoon schools. Students, parents and staff in guest shift-sharing schools were much more likely than those in host schools to say in the survey that it has been ‘difficult’ or ‘very difficult’ getting to and from school

while co-locating. A substantial majority of students (72%) and staff (69%) at the host/morning schools, and a smaller majority (53%) of parents, said that they found transport to and from school either 'no different' or 'easier than before'. On the other hand, 75% of parents, 70% of staff and 55% of students at guest schools said that they found it 'difficult' or 'very difficult'. The group of respondents at site-sharing schools that found transport difficult is mostly comprised of those from Unlimited Paenga Tawhiti and Discovery One schools. Students in guest schools seem to have felt less 'put out' by the changed travel arrangements than parents or staff.

Table 6: Relative difficulty of getting to and from school while site-sharing

Q8. How difficult is/was it getting to and from school while site-sharing?

	Students		Parents		Staff	
	Host school	Guest school	Host school	Guest school	Host' school	Guest' school
Very difficult	2%	5%	15%	26%	5%	32%
Difficult	16%	50%	31%	49%	26%	38%
No different to before	69%	32%	47%	21%	60%	11%
Easier than before	13%	14%	6%	4%	9%	19%
n=	5,782		1,614		623	

Family finances

The main impacts on family finances raised in the interviews came from students, parents or staff in the shift-sharing schools. Several students in those schools, for example, reported that they had either lost their after-school job as a result of co-location timetable changes, or had reorganised their job times. At one guest school, three of the five students interviewed said they had left their after-school work as they were unable to attend under the new timetable. One had taken up employment in a family business in the mornings to make up for the loss of income. One student had to leave her job as the business's building was destroyed and her employer is now out of business.

Many parents from both host and guest schools also reported in the survey that the cost of transporting children to and from school and school events had increased during co-location, while a few said they had given up their part time jobs in order to be home to supervise their children before or after school. A number of parents at one host school said that the changed start and end times meant that host school parents had also incurred significant extra transport and childcare costs, as had many guest school parents.

In the survey, parents of children at guest schools were twice as likely to report that their personal finances had been negatively affected by co-location as parents of students at host schools. Thirty-seven percent of the former reported increased personal costs, probably reflecting the increased cost of transport. Students at guest/afternoon schools were also much more likely to report negative effects (loss of part time jobs, increased transport costs etc.) on their personal finances than students at host/morning schools. Over a quarter of students at afternoon schools reported such effects, compared to 6% of students at morning schools. The same trend is apparent for staff at guest/afternoon schools, 44% of whom reported negative effects on finances compared to 10% of staff at host/morning schools.

Table 7: Effects of co-location on family finances**Q12. Have your personal finances been directly affected by the site-sharing arrangements?**

	Students		Parents		Staff	
	Host school	Guest school	Host school	Guest school	Host' school	Guest' school
Yes, negatively affected	7%	26%	19%	37%	10%	44%
Not affected	82%	65%	77%	55%	88%	52%
Yes, positively affected	11%	9%	4%	9%	2%	5%
n=	4,953		1,576		599	

Summary**Family life and daily routines**

The effects of co-location on the family lives of staff, students and parents/whānau were often little differentiated in people's minds from the effects of the earthquakes in general. Overall, the effects on family life that were attributable to co-location, have been greater for the communities of shift-sharing schools than those of site-sharing schools, and were greater for the families of guest schools than host schools.

The greatest effects of co-location on family life have related to disruptions in transport, daily routines, and anxieties about students' safety as a result of timetable changes in the shift-sharing schools. Changed commuting patterns and commuting longer distances, along with children's security while at home alone or travelling to/from school in the dark, have been of concern for families in both host/morning and guest/afternoon shift-sharing schools.

Parents of children at guest schools were twice as likely to report that their personal finances had been negatively affected by co-location as parents of students at host schools. Thirty-seven percent of parents at guest schools reported increased personal costs, probably reflecting the increased cost of transport. Students at guest/afternoon schools were much more likely to report negative effects (loss of part time jobs, increased transport costs etc.) on their personal finances than students at host/morning schools.

While the students in shift-sharing schools tended to spend their respective mornings or afternoons at home, their teachers tended to spend that time at school. Seventy percent of teachers stated that they mainly spent their non-classroom time at school, preparing lessons, marking, attending school meetings, or attending to other administrative tasks. Several of the teachers in interviews said that their daily work pattern had changed in that they were now doing at school during an extended working day a lot of what they had previously done at home after dinner at night.

3.4 Curriculum, teaching and learning

For many staff, students and families in the shift-sharing schools, co-location has involved a significant rearrangement and rescheduling of their 'non-school day'. These changes have resulted in further changes, for some for the better and for some for the worse, in their commuting and transport arrangements, in some aspects of their normal family life, and in when and how students spend their *non-school* time. But what of the impact of co-location on how students and staff spend their *in-school* time? In this section we identify students', parents', and staff' opinions and perspectives on the effectiveness of co-location with respect to three key aspects of *in-school* and *in-classroom* life: the effects on curriculum coverage in the schools, the impact on the ways teachers teach, and the effects on outcomes for students.

Generally, in the site-sharing primary and intermediate schools there was little change in the curriculum coverage. In the co-located shift-sharing schools, however, students covered fewer curriculum topics than before co-location, teachers taught differently, and anxiety levels about achievement in NCEA significantly increased. These effects appear to be attributable to co-location (rather than the wider effects of the earthquakes or the domestic circumstances of staff and students), in particular, the shortened school day and compression of lessons in the shift-sharing schools.

Curriculum coverage

The impact of co-location on curriculum delivery in the primary and intermediate schools seems to have been much less than its impact in the secondary schools. The primary and intermediate schools retained (more or less) their normal in-school timetable and only reduced their curriculum offerings and coverage to the extent that, like all the Christchurch schools, they lost three to four weeks of lessons immediately after the February earthquake. One possible exception was the Breens Intermediate – Heaton Intermediate site, where neither school was able to provide a full science programme during the six weeks of their co-location because the Breens Intermediate School specialist science laboratory was converted to a general classroom.

The situation in the 11 co-located secondary schools, however, and especially for the Year 11-13 students doing NCEA, has been rather different. Staff and students commonly noted during the interviews that teachers and students were struggling to 'get through' the curriculum in the shortened time available. Shorter teaching days, combined with shorter class periods and the time lost from school closures immediately after the earthquakes and larger aftershocks, made it difficult for teachers to cover their usual curriculum. Most have responded by dropping certain content or topics, and/or by reducing the number of NCEA assessments available to Year 11-13 students. Students at one school said, for example, that the number of credits available there has been reduced, and that some subjects (eg, biology) have dropped internal assessments while others (eg, physics) have made external assessment optional. Some students noted that as they are doing Cambridge exams they have to cover the whole curriculum, which they could only do by changing classes and working much harder in their own time. One student said that he had 'lost' two scholarship papers, and was now struggling to accumulate enough credits for UE because some internal assessments had been dropped. Similarly, at another school, the English department has dropped some of their planned NCEA credits, cancelled an annual biology field trip, and negotiated time extensions from NZQA for submitting art portfolios.

Students from most of the schools commented on their homework load under co-location. Similar comments came from students and teachers at the other secondary shift-sharing schools. Some students in the schools said that the amount of homework had increased to compensate for reduced coverage of material during classes, although others said that their homework load had decreased overall. Other students commented that there was now more time out-of-class to get homework completed.

Teachers said that they were responding to the lack of teaching time available by reducing assessments and content coverage. A teacher at one school told us that they were 'narrowing' the curriculum at the school, and reducing their 'externals' and focusing on 'internals' in terms of assessments. Other teachers talked of having to 'streamline content',

'cut away the fat', 'skip planned content' and so on. One English teacher said his response had been: 'let's do less, and let's do it properly'. For some, the effects of the compressed school day on programme delivery were compounded by the unavailability of key resources due to infrastructure losses in the wider city. For example, one teacher complained that her Year 13 students could not access the required art books that were in the city library, and another commented: 'try getting standards in watching drama performances when there are no theatres open – some standards are impossible.' Throughout the interviews there was a general feeling expressed that they would 'cover' less over the year. As one teacher put it: 'Overall everything feels like it is bare bones and being pared right back.'

Teachers and students reported a range of strategies for compensating this reduction in coverage, including:

- teachers providing informal tuition for scholarship students at lunchtimes
- teachers providing extra voluntary lessons in the mornings/afternoons if rooms were available
- setting and doing more homework
- more effective use by students of their scheduled study periods
- increased student use of the study centres.

One Linwood College Year 13 student reported taking advantage of the offer by Auckland's Rangitoto College to tutor Christchurch students during the school break. Other students reported using holiday time at South Learning Centre, which booked in time for students from co-located schools, and at NatColl, which taught courses on some sites during the school holidays.

The extent to which schools were able to provide out of class tuition and academic support for students outside the new afternoon or morning hours differed greatly from school to school. Some provided extra classes in usable classrooms in their home sites, one of the larger schools was able to continue its senior classes into the afternoon, and several successfully promoted the use of the study centres on or very close to their home or new sites. The use of on-site, or very near on-site, study centres was reported to be greater than that for study centres at a distance from the guest or host schools.

The reports of reduction in curriculum coverage and assessment opportunity in the shift-sharing schools noted above were not clearly differentiated between guest and host, morning or afternoon schools, but seemed to be articulated equally by both. With regard to NCEA assessments, similar numbers of students from guest and host schools said they were entering fewer standards. Fifty-two percent of the senior students who said that they were entering fewer Standards as a result of co-location were from guest schools, while 48% were from host schools.

It is also noted that St Bedes College and Marian College were able to make each other's option subjects available to both of their respective students. Some 65-70 Marian College girls attended St Bedes College' morning classes in subjects Marian College could not offer, and a smaller number of St Bedes College boys stayed on to take Marian College's afternoon classes in subjects that St Bedes College did not offer. In this case, in particular, co-location actually opened up and increased the range of subjects the two schools could offer students. However, it also meant that these students were 'in class' sometimes from 8am in the morning until c.6pm in the evening, and thus had a much longer school day than the majority whose school-days were being significantly compressed. We note also, though, that the co-location with St Bedes College also reduced the Marian College's capacity to offer a full curriculum in one respect, in that food technology facilities were not available at St Bedes and so these classes were held at a third school (Mairehau High School) after the latter's school day had finished.

Teaching methods

One common response to the compressed teaching day in the shift-sharing schools has thus been to reduce the coverage of *what* is being taught in classes and *what* is being assessed for NCEA. Another common response has been to change the *ways* in which such content is taught. Co-location, or more particularly the compressed school day that was implemented in the shift-sharing schools in order to make co-location workable, not only changed curriculum and assessment coverage, it also changed pedagogy.

What changed? Site-sharing schools

For the most part, teachers in the *site-sharing* primary and intermediate schools continued to work to more or less the same timetable as before, and for more or less the same number of hours over the day. They taught their own classes and taught those students all or most of what was in most respects a normal day but in a different location. Accordingly, there was little report from the site-sharing primary and intermediate schools of changes in the content they covered or the ways in which they taught it.

Exceptions to this were the two central city alternative schools, Discovery One and Unlimited Paenga Tawhiti. Both these schools are special character schools in that they have a strong commitment to open plan learning spaces and an open, negotiated curriculum drawing on the resources of the inner city. Most teachers in these schools said that their teaching methods had changed as a result of site-sharing. They found that the changes in the physical environment arising from now having to work in traditional-looking classrooms in a semi-rural setting resulted in a change in the ability of the staff to be close to students at all times, and subtle changes in their ability to implement the teaching approaches that match their special pedagogical philosophies as schools.

A symbolic manifestation of this, according to one teacher, was that many of the students have started calling their learning advisers 'teachers'. The separation of the relocatable buildings and villas that are now part of Unlimited Paenga Tawhiti were not seen as providing the same type of individual and group learning spaces that the students were used to, and teachers reported feeling constrained into 'traditional' forms of pedagogy in the new environment.

These schools run highly individualised programmes, and while they reported that they have largely maintained this aspect of their programme, they have done so with very few of their normal facilities and resources available to them. Students have reduced time with their learning advisers because of the bus system, which defines the time the students and staff now spend on site. Learning advisers have been encouraging students to think about studying for another year, and they said that many of the senior students are rethinking what university or tertiary study they might attend. Unlike teachers and students in many of the other secondary shift-sharing schools, they are focusing on the end of year exams rather than focusing on internal assessments. Teachers at both schools commented that having little or no internet connectivity on the new site has had an impact on the students' ability to get on with their usual programme. Many of the students in the schools had daily access in the CBD to cutting edge computing facilities. They also felt that the flow of students from one area of the school to another is 'confined' by the architecture of the new site, and constrained in some respects by the loss of access to their usual businesses and 'city-based' community. They said they now lack large spaces for meetings and for teaching and learning, and were constrained in terms of some of the kinds of teaching activities they were used to implementing. On the other hand, both students and teachers at the schools saw a real positive from co-location in their access to 'green spaces' and large playground areas.

What changed? Shift-sharing schools

The great majority of reported changes in teaching approach and methods, however, came from the other secondary schools that were shift-sharing. Staff, parents and students in these schools almost universally reported in the interviews that in the shift-sharing situation teaching methods and the general tone of lessons had dramatically changed during co-location. In part this was a response to the loss of three weeks teaching time in February-March, but even more as a result of the compression of the school day and reductions in the length of periods in the shift-sharing sites. The

pressure to 'get through the curriculum' in a much reduced time window was thus significantly increased, especially for senior students and their teachers. Accordingly, there was much reported from all groups that as a result lessons had become 'more intense', 'more focused', 'no-nonsense', 'high energy', having 'less fat in them', being 'more efficient', with 'no fluff', and so on.

They often noted that lessons were more teacher-centred and transmissive than before, with less time devoted to working with individuals, more time on whole-class activities and 'book work', and less time for student experimentation or 'learning by doing'. One teacher from a host secondary school reported that they 'tends to lecture rather than teach. I give them handouts and Powerpoints. I talk about or lecture it and they go home and review it.'

Most of the schools reported that teaching in resource-heavy and practical subjects such as science, art, music, technology and physical education (PE) seems to have changed the most. In part, this was said to be due to the lack of time at the beginnings and ends of shortened, 40-45 minute periods for the teacher to set up equipment and the like, and partly due to lack of time for the students to do practical activities. One science student, for example, spoke of having to 'spend one day writing up the experiment, and do it the next' – a reversal of the usual way of approaching scientific experiments. "There is often no time for the practical" said one teacher, "so we have to show students rather than [have them] do it. Food technology ... [You] can't *do* cooking in 45 minutes!". At least two schools have created double periods for practical subjects to counteract of the impact of shorter periods, and reported this as a successful strategy.

Other comments on changed pedagogy include:

- "It is hard to use the afternoon for planning and preparation as we do not have access to our classrooms, science labs especially." (Teacher, host/morning school)
- "There is only 10 minutes at the end of the day for teachers to clean up – this is very stressful for the teachers. Demonstrations have to be done instead." (Teacher, host/morning school)
- "It's hard to get everything down, and there's no time to practice." (Student, host/morning school)
- "We have reverted to 'more traditional' ways of teaching – especially in practical subjects such as PE and Science." (Teacher, host/morning school)
- "There is a lot more book work to do, and the school does not provide a lot of on-line support." (Student, guest/afternoon school)

About half (51%) of the teachers in site-sharing primary or intermediate schools who responded to the survey said that during co-location their teaching methods and approaches had changed under co-location, whereas 86% of teachers in the secondary shift-sharing schools said that they had changed. This tended to confirm our impression from the interviews that in the site-sharing primary schools teaching remained much more 'business as usual' than in the shift-sharing secondary schools.

Effectiveness of changes

If the staff, parents and students at the secondary schools were generally agreed that teaching *has changed* in some notable way during co-location, there was much less consensus among them as to whether those changes were for the ‘better’ or the ‘worse’ in terms of student outcomes and achievement. Some teachers, and students, thought that through these changes their teaching had become *more* effective during co-location, while others claimed that it had become *less* effective.

Taking one group interview of students at a host school as an example, one junior student said that his classes had become ‘more lecture like’ while another in response said that he liked the lecture style ‘where the notes are taken in class and we do the activities at home’. Another said he too felt they were not missing out on any learning, but acknowledged that there was not enough time in science and technology to get everything done. A third student added that his parents did not like the idea because it meant he had so much homework. Such contrasts were quite typical of many interviews in the shift-sharing schools. The broad range of opinion expressed about the relative effectiveness of changes in teaching methods is well represented by the five paraphrased excerpts from interviews cited below.

<ul style="list-style-type: none"> • As a teacher I have found the 45 minutes to be excellent. There's a real focus. Straight into it. There's no fluff.... There's real purpose in there. The kids respond. I have actually found that I have got through the work that I usually do in an hour quite easily. They are high-energy lessons. (Senior Teacher, guest/afternoon school) • It's not all a chalk and talk exercise, 'let's get the stuff down on paper and you get into your books'. We are still doing the exciting and interesting stuff that we do in class as well. It's just that it's straight into it now. (Teacher, guest/afternoon school) • 45 minute lessons were just the right length of time to keep students focused. Any longer and they lose steam. I was very impressed with the shortened periods and how it improved motivation in students. (Teacher, host/morning school) 	<ul style="list-style-type: none"> • You can hear some teachers from some schools saying 'oh, its great now we have forty minutes or forty five minutes instead of an hour, and you can just go 'bang' and it's done'. But the point is you are leaving behind all the slower kids. You can't do the enrichment activities with the top kids in the class. And you haven't got time to put in place those great literacy strategies or the thinking inquiry, if you are just kind of, pouring it in. It's just really bad education. (Principal, guest/afternoon school) • Shorter lesson times are not a good thing. There is less time to discuss and elaborate on topics. For students who are kinaesthetic learners the shorter lesson times and the way that the teaching is being done makes it very hard to be hands-on, and there is less time for the visual and interactive. There is a need for self-directed learning and a focus on written work. There is more homework and it is harder to get clarification. (Parent, host/morning school)
--	--

A similar difference in opinion about the perceived effectiveness of changed teaching approaches in the shift-sharing schools is also represented in the survey responses. In the survey we asked students, teachers and parents whether or not they thought teaching had changed for the better or worse during co-location.

In the shift-sharing schools 25% of staff said that these changes had made their teaching more effective than before, while 42% said it had changed, but was neither more nor less effective than before, and 19% felt they had changed to be less effective. Students and parents were less likely than teachers to report that teaching methods had changed (55% and 66% respectively said they had not changed), but were similarly divided on whether or not any changes they did observe were for the better or worse (around 20% for both options). Senior secondary students were more likely to say that teaching methods had changed to be less effective than junior secondary students, and junior students were more likely to say that the changes had been for the better than senior students.

Table 8: Changes in teaching methods during co-location**Q19. During site-sharing teaching methods and activities in my classes**

	Staff		
	Site-sharing (p/l)	Site-sharing (Sec)	Shift-sharing
Changed - More effective	4%	9%	25%
Changed - Neither more or less effective	27%	27%	42%
Did not change	49%	9%	14%
Changed - less effective	20%	55%	19%
n=	49	11	290

	Students				
	Site-sharing (P/l)	Site-sharing (Sec Jnr)	Site-sharing (Sec Snr)	Shift-sharing (Sec Jnr)	Shift-sharing (Sec Snr)
Changed for the better	22%	16%	5%	26%	22%
Did not change	61%	31%	34%	62%	55%
Changed for the worse	17%	53%	61%	12%	23%
n=	892	51	64	2115	2188

Strategies adopted to compensate for the loss of lesson time in the shorter periods included the adoption by several schools of double periods for practical subjects, placing five minute transition breaks between periods in the timetable, and, in some cases, an increased use of asynchronous on-line support for students.

Although overall little mention was made in the interviews of using on-line alternatives to compensate for lost classroom time, a few individual teachers did mention it. At one school, for example, one teacher noted that she was using the school intranet site a lot more to post activities and lesson information for students than she had before the co-location. A teacher at another school said that because she was finding it hard to give feedback at the time during the lesson, 'I will now go on-line and look at students' work and give feedback electronically' in non-class time. At one of the sites which had problems providing fast broadband, teachers reported that they tried giving students on-line research tasks but their access became so slow as to be almost 'not worth the effort.' The person contracted to oversee the reestablishment of IT systems in the co-located schools said that there had been little time, consideration or opportunity for teachers to develop on-line alternatives to provide extra teaching and learning to supplement formal classes, and only a very few teachers were trying it.

Student outcomes

It is beyond the scope of this study to assess directly the effects of co-location on students' academic achievement. At the time of data collection, few if any of the schools had any internal assessment results for NCEA and they had not yet begun their cycles of internal examinations. Arguably the best measure of this would be an analysis of the co-located secondary schools' NCEA results and the National Standards results of the primary and intermediate schools at the end of the year.

We were, however, able to establish what some of the effects of co-location on students were *thought* or *expected* to be in the minds of the staff, students and parents. As part of the interviews, and also in the surveys, we asked students, parents and staff what they considered the effects of co-location had been to date on five specific areas of student outcome. These were: students' self-reported academic performance to date, their expectations of their academic

performance in the NCEA over the year (secondary only), their levels of motivation and attitude to learning, their classroom behaviour, and their school attendance.

Academic achievement

In the interviews the primary school students were generally reported to be 'on track' with their academic achievements, even considering the start-stop nature of the year. The Year 7 students at Merrin Primary School had just won the Cantamath title for 2011 and parents and teachers seemed pleased to see that the students were continuing to progress well. No significant changes in student performance were reported by intermediate teachers. The Heaton Intermediate School principal, for example, said she believed learning had been little affected by co-location, noting that they had kept their lesson programme intact and had only been co-locating for a very short time. Staff from many of the schools touched on the distress and tiredness that some students were battling with, but this was clearly connected with the earthquakes themselves rather than being a result of the site-sharing. Some teachers talked about how difficult it is to gauge at this stage any changes to academic achievement levels.

In the *site-sharing* schools, 94% of parents, 74% of students and 90% of teachers felt that students' academic performance had either not changed or had actually improved as a result of co-location. By contrast, in the *shift-sharing* schools rather smaller proportions of parents (73%), and students (79%) felt that it had either not changed or improved, while the majority of staff (61%) felt they had deteriorated. In the surveys, parents and students seem to be more optimistic, than staff about the likely effects of co-location on student academic performance.

These aggregated figures tend to hide two areas of significant difference in people's views on students' academic performance, especially in the shift-sharing schools, and these relate to differences between senior and junior students and between guest/morning and host/afternoon schools. In the shift-sharing secondary schools, senior students and parents of senior students were much more likely than junior students and parents of junior students to report a deterioration of academic performance because of co-location. Over a third of senior students and parents of senior students, and nearly two thirds of staff believed that academic performance had deteriorated because of co-location. There were also differences between host shift-sharing schools and guest shift-sharing schools in that students, parents and staff in guest schools were all more likely to report negative effects on performance than host schools. Any negative effects of co-location were felt to be greater for senior students than for juniors, and greater for students in guest schools than in host schools. This probably reflects and reinforces a generally greater concern for students doing high stakes assessments and the often-expressed preference for morning over afternoon timetables in co-located schools.

Table 9: Academic performance in site-sharing and shift-sharing secondary schools

	Students				Parents		Staff			
	Site-sharing (Jnr)	Site-sharing (Snr)	Shift-sharing (Jnr)	Shift-sharing (Snr)	Site-sharing (Jnr)	Site-sharing (Snr)	Shift-sharing (Jnr)	Shift-sharing (Snr)	Site-sharing (Sec)	Shift-sharing (Sec)
Improved	9%	9%	18%	12%	75%	47%	8%	7%	7%	4%
Did not change	67%	38%	69%	54%	19%	53%	77%	56%	86%	35%
Deteriorated	24%	54%	12%	34%	6%	0%	16%	37%	7%	61%
n=	54	69	2192	2271	16	19	605	539	14	271

Shift-sharing schools only	Students		Parents		Staff	
	Host school	Guest school	Host school	Guest school	Host school	Guest school
	Improved	19%	12%	10%	9%	4%
Did not change	65%	57%	67%	64%	45%	33%
Deteriorated	16%	31%	23%	26%	50%	63%
n=	2434		667		208	

In the secondary schools, therefore, concerns among teachers, parents, and students themselves centered on their likely performance in the NCEA. Anxiety regarding NCEA performance was a major concern expressed by all groups in virtually all interviews. Many senior students indicated that they were rethinking their study plans, for example, going for University Entrance (UE) rather than scholarship, or dropping the number of standards they were going for. Others reported that ‘a lot of Year 11’s have switched off... they don’t care... they don’t see the point’, and that the earthquake and other disruptions had made many unable to concentrate and without motivation. Several principals also mentioned a perceived difference between their more and less academically able students. ‘It’s the bottom end that are really struggling,’ said one principal, ‘[whereas] the top end are really firing... They are working like little Trojans’. Parents, in particular, commented that lower than expected performance in NCEA and reducing the number of credits attempted could unfairly compromise their children’s chances of gaining access to restricted courses at university next year.

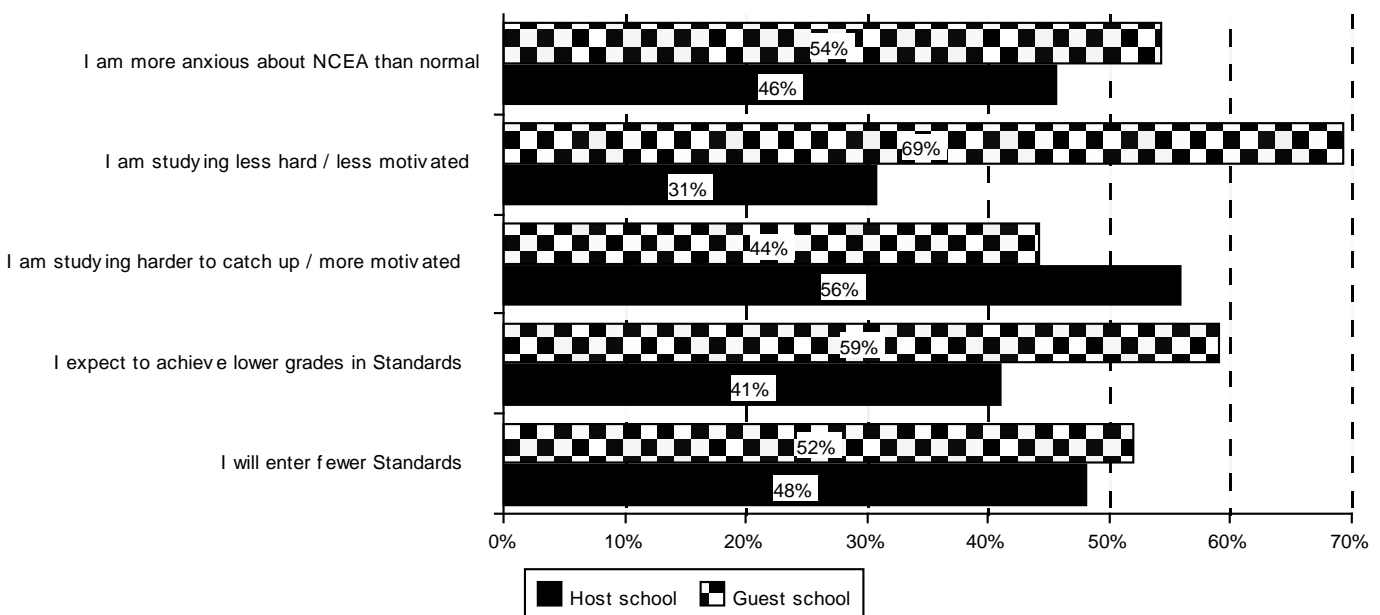
Our main concern is the huge amount of teaching time our children have lost from combined EQ, snow and site-sharing down time, most especially for the NCEA students (both our children are in this bracket). (Parent, host school)

I have involved my daughter and she says she found site-sharing good ... but stressful for her because there was a lot of pressure from teachers to work harder and faster. She has still managed plenty of excellences though. (Parent guest school)

Less study time has been available which may mean lower results - this has a knock-on effect with university scholarship awards (highest payment for excellence) being in jeopardy. (Parent, host school)

Senior students were also asked about any changes in their expectations and attitudes with regard to NCEA this year because of co-location. The most common response was that they were more anxious about NCEA than normal, followed by the statement that they were expecting to get lower grades. There was an across the board tendency for students in host/morning schools to respond more positively about NCEA expectations than students in the guest/afternoon schools. There was also a gender difference in that girls were more likely than boys to report being more anxious about NCEA, as well as more likely than boys to be studying less hard and be less motivated.

Figure 4: Senior students’ expectations with regard to NCEA in host and guest schools



In the interviews, staff seemed reasonably well informed about the allowances and procedures with respect to the 'derived grades' that NZQA has implemented for the earthquake affected schools in Christchurch. Students and parents, however, seemed rather less well informed, often noting that they were aware allowances existed but did not know specific details. In the survey about a third (30%) of teachers in the co-located schools felt that these NZQA allowances and procedures were 'adequate', while a quarter regarded them as 'good' or 'excellent'.

Motivation

In most of the site-sharing schools, students' increased or declined motivation to learn was not raised as a significant consequence of co-location. Teachers, students and parents generally said they had noticed no significant changes to motivation to learn, and several mentioned how much the students' resilience and social confidence had grown. Among the site-sharing schools, some staff commented that some of their senior students had shown a lack of focus and concentration through a combination of 'earthquake brain' and the disruption to their usual learning activities on the new site. Their attitude, one said, was, 'don't know-don't care', although they all seemed happy to be back at school. Nevertheless, three-quarters or more of students, parents and staff (74%, 75% and 78%, respectively) in site-sharing schools generally said that students' motivation and attitude to schoolwork had not changed as a result of co-location.

Table 10: Motivation and attitude to work

Q17. As a result of the site-sharing my motivation and attitude to school/work

	Students		Parents		Staff	
	Host school	Guest school	Host school	Guest school	Host' school	Guest' school
Improved	27%	15%	15%	8%	23%	8%
Did not change	59%	51%	63%	62%	49%	28%
Deteriorated	15%	34%	22%	30%	28%	64%
n=	5,613		1,569		526	

In the shift-sharing schools it was stated several times in interviews that the more capable senior students seem to be more willing to make an extra effort to counteract negative impacts of co-location, while less highly achieving students may have 'given up', though this may well have been an effect of the earthquake and their domestic circumstances rather than the effect of co-location. The effect of co-location on student motivation in the secondary schools seems to be in some ways the reverse of that in the primary and intermediate schools. Almost half (48%) of secondary/shift-sharing teachers felt that students' motivation and attitude to work had deteriorated as a result of co-location, while about 15% said it had improved. However, 68% of parents and 70% of students felt that student motivation had either not changed or had improved as a result of co-location. Staff, parents and students at host/morning schools were all more likely to say that student motivation had either not changed or had improved under co-location. On the other hand, 64% of staff at guest/afternoon schools said that student motivation had deteriorated because of co-location.

Behaviour

Similar trends to those around motivation were apparent with respect to student behaviour under co-location. The great majority of students (92%), parents (96%) and staff (83%) at the site-sharing primary and intermediate schools, who responded to the survey, said that student behaviour had not changed or had improved as a result of site sharing. Similar proportions were reported by students, parents and staff at the secondary shift-sharing schools (87%, 87% and 71% respectively).

Staff at the site-sharing primary and intermediate schools reported initial 'teething problems' associated with differences in rules and regulations between the schools (for example, on mixing with the juniors, eating lunch sitting down, and early arrival at school). Overall, however, student behaviour had been relatively unaffected by the change.

Table 11: Behaviour at host and guest schools**Q15. As a result of site-sharing my behaviour at school:**

	Students		Parents		Staff	
	Host school	Guest school	Host school	Guest school	Host school	Guest school
Improved	17%	9%	7%	4%	37%	14%
Did not change	76%	73%	84%	84%	52%	45%
Deteriorated	7%	18%	9%	12%	10%	41%
n=	5,576		1,568		567	

In the secondary schools overall, staff seemed to be divided about trends in student behaviour. Most schools reported some anecdotes of misbehaviour attributable to the new situation, usually incidents between students of the two schools, and often incidents occurring either on and around the buses or in school grounds at changeover times rather than in class. Most, however, also reported instances of improvements in student behaviour, especially within-class behaviour, under the new regime. They tended to attribute this partly to the reduced time within classes and increased intensity of lessons, and partly to the absence of formal lunchtimes and other occasions for students to congregate out of class. One teacher noted that ‘with no lunchtime and the compressed day there’s less opportunity for them to get into trouble’. Another teacher commented that ‘the boys have taken really well to the early starts. It has taken the afternoon out, and also the last 10 minutes of class, which is when most of the problems occur.’ As was the case for motivation, too, no change or improvements in student behaviour were more commonly reported by host/morning schools and deteriorations in behaviour more by guest/afternoon schools.

Attendance

“Generally attendance has been high. People are keen to go somewhere that is relatively calm, with their friends, [and] with flushing toilets. Many students are onsite very early.” (Principal, guest/afternoon school)

Somewhat contrary to their expectations, principals and staff often reported in interviews that levels of attendance had generally stayed high during co-location. Several students and staff in the interviews stated that any non-attendance seemed greatest at the very beginning of the co-location period and for a few days immediately following the largest aftershocks since. They therefore tended to attribute any differences in attendance pattern to the earthquakes themselves rather than the co-location. “They are all turning up,” said one principal at a host/morning shift-sharing school, “and the ones we had issues with – well we have two vans picking them up. They are all here 100%. There is less lateness. All the research says adolescent boys should start later – but they all seem to be here.”

In the two secondary schools that provided attendance figures, one principal identified a truancy rate of 8.5% during co-location, which was very close to the truancy rate for year prior of about 8.2%. He noted that Years 9, 10 and 11 were significantly worse than Year 13 on 5%. The second principal noted that before they started tracking attendance immediately after the February quake it had averaged 60%. Before the June 2011 earthquake it was 91%, but briefly after the June quake ‘it blew out again’ to 60% before returning to normal levels.

In the survey, students and parents at both site-sharing and shift-sharing schools tended to report either no change or increased levels of attendance more often than staff. In the shift-sharing schools, for example, where this difference was the greatest, the great majority of students (86%) and parents (90%), but a much smaller majority of staff (59%) said they believed attendance had either not changed or had improved under co-location. 41% of staff, mostly from guest afternoon shift-sharing schools, said they thought attendance had deteriorated.

It is also noted that the schools that seemed to identify the most attendance problems specifically due to *co-location*, as opposed to the earthquakes, were also the schools where the students were most spread out geographically and have the

furthest to go to attend their new site. In this respect, there seems to be a correlation between non-attendance (students' self-report) and length of commuting time ($X^2 > 35$; $p < .001$).

It is also noted that the proportion of guest school students with reportedly 'deteriorated' attendance was often twice that of host school students. Fifty-two percent of staff at guest/afternoon shift-sharing schools who responded to the survey said they thought attendance had deteriorated during co-location compared to 24% in host/morning schools. The great majority of students and parents, however, said they thought attendance patterns had not changed.

Table 12: Attendance at guest and host schools during co-location

Q18. As a result of the site-sharing my attendance at school

	Students		Parents		Staff	
	Host school	Guest school	Host school	Guest school	Host school	Guest school
Improved	16%	9%	3%	3%	17%	12%
Did not change	75%	75%	91%	85%	59%	36%
Deteriorated	9%	16%	6%	12%	24%	52%
n=	5,679		1,609		528	

Māori and Pasifika students

One guest/afternoon school principal said that the Maori and Pasifika members of her school community had been 'hit pretty hard' by the earthquakes and, because they were often coming longer distances to school, were likely to be incurring extra costs. Noting the difficulties many of its Pasifika students were experiencing getting to school across the city in the mornings, one host secondary school assigned a special minibus to tour the eastern suburbs and pick up these students from their homes each day. Because it did not have access to its student records in the earthquake, another school released some Māori staff to work with the community to help locate earthquake-affected Māori students whose families had stayed in Christchurch and to help them get back to school. These were reported as being successful strategies by both schools.

Halswell Residential College, the co-located school with the highest proportion of Māori and Pasifika students, lost its Māori focus unit as a result of significant roll changes. The unit was merged with another unit within the school, but staff commented that they have found it particularly difficult to establish their kaupapa in this merged unit.

A few other schools reported that kapa haka groups had been among the many cultural activities that had been curtailed or given up in the co-located situation. On the other hand, several others with relatively high Māori and Pasifika populations have retained their kapa haka group and Pasifika programmes. Linwood High School has kept its Pasifika unit operating daily and reported that a lot of Māori and Pasifika students attend. It was seen as providing a warm, safe learning environment for them.

The principals of at least four of the co-located schools said that Pasifika and, to a lesser extent, Māori families were disproportionately represented in the groups leaving Christchurch immediately following the earthquake, and that had affected their Pasifika and Māori rolls. For those that remained, however, when analysed according to students' ethnicity, the surveys show few significant differences between or among Māori, Pasifika and European students' responses, though we note that both Māori and Pasifika groups are slightly underrepresented in the survey in relation to their proportion in the Christchurch school population. Pasifika students appear to be less likely than either European or Māori students to expect to achieve lower grades in NCEA, to be less anxious about NCEA, to be more likely to say their academic performance and attendance had improved, and to be more likely to say their relationships with family and friends had changed for the better under co-location.

Summary

Curriculum, teaching and learning

For the most part, teachers in the site-sharing schools continued to work to more or less the same timetable as before, and for more or less the same number of hours over the day. They taught their own classes and taught those students all or most of what was in most respects a normal day but in a different location. Accordingly, there was little report from the site-sharing primary and intermediate schools of changes in the content they covered or the ways in which they taught it.

In the co-located shift-sharing schools, however, students have covered fewer curriculum topics, teachers have taught differently, and anxiety levels about achievement in high stakes assessments have significantly increased. Insofar as these effects are attributable to co-location (as opposed, for example, the earthquake, or the domestic circumstances of staff or students), they seem to have been largely a consequence of the shortened school day and the compression of lessons into shorter-length periods in the shift-sharing schools.

Staff at shift-sharing schools, in particular, said that they were working longer hours, and that their work had 'intensified' significantly during co-location. In many schools, senior management staff felt that their normal duties have suffered because of the extra workload imposed by post-earthquake and co-location administrative tasks, whereas, for classroom teachers, much of this intensification was attributed to the shorter periods and lack of preparation or transition time between classes under the new timetable.

The staff, parents and students at the shift-sharing secondary schools generally agreed that methods of teaching have changed in notable ways during co-location. In particular, lessons were reported to be more teacher-centred and 'focussed', with less time available for student feedback and interaction. However, there is much less consensus as to whether those changes have been for the better or the worse in terms of student outcomes and achievement. Some teachers, and students, thought that through these changes their teaching has become more effective during co-location, while others claimed that it has become less effective.

In the shift-sharing secondary schools anxiety about student performance in the NCEA is high. As a result of co-location and the compression of their school timetables, teachers and students in the shift-sharing schools have covered less of the curriculum, and many have reduced the number of NCEA assessments attempted compared to other schools.

Senior students and their parents were much more likely than junior students and their parents to report a deterioration of academic performance because of co-location. Over one-third of senior students and their parents, and two thirds of staff, believed that academic performance and student motivation had deteriorated because of co-location. Students, parents and staff in guest schools were all more likely to report negative effects on attitude and performance than host schools, and these were felt to be greater for senior students than for juniors. This reflects and reinforces a generally greater concern for students doing high stakes assessments and the often-expressed preference for morning over afternoon timetables in co-located schools.

Attendance and behaviour were reportedly less negatively affected by co-location than attitude and academic performance. The majority of parents, students and staff in host/morning schools reported that student attendance and behaviour had either not changed or improved during co-location, though up to half of those in guest/afternoon schools reported deterioration in these.

When analysed according to students' ethnicity, the surveys show few significant differences between or among Māori, Pasifika and European students' responses. Some effects on student outcomes may have been slightly greater among Pasifika students, but Māori and European students tended to respond similarly to each other on all questions.

3.5 Social and professional relationships at school

We were struck in the interviews by the degree of resilience and commitment the staff, students and parents showed to their particular schools, and the high levels of good-will they expressed toward each other – their desire, as several expressed it, ‘to make this work’. There were numerous anecdotes of sharing and collaboration as well as anecdotes of segregation and competition in individual circumstances. Overall, however, the guest school communities were grateful to their hosts and the host school communities were generous in their accommodation of their guests. In the interviews, people often talked of feeling ‘stressed’, ‘anxious’, ‘fragile’, ‘tired’, ‘grieving’, and ‘uncertain’, on the one hand, but they also talked of being ‘strong’, ‘resilient’, ‘resourceful’, ‘appreciative’, ‘understanding’, and ‘committed’ to each other, on the other. While not without stresses and strains, it was this sense of good will towards each other and sense of sacrifice, as much as any practical systems or organisations, that made the relationships ‘work’ in the co-locating schools.

Given the circumstances, we couldn't have asked for more. Teachers at both schools did all they could to make it a very positive experience. ... I noticed she developed a slightly tougher exterior whilst site sharing ... She was very happy to get back to her own school but probably learnt a great deal through the experience. (Parent, host school)

I think the experience has made my daughter a stronger, more resourceful, more compassionate and socially aware person. (Parent, guest school)

I feel it worked because the teachers made it work. (Parent, host school)

It was an interesting experience sharing our school, but nevertheless they needed our help.

In outlining the effects of the co-location on people's social and professional lives, it is important to consider the broader crisis context that occasioned the co-locations, and the ongoing disruptions to many aspects of daily life that have affected many in the co-locating schools' and their communities since. The anxieties caused by ongoing aftershocks and the uncertainties that many of the schools' staffs, students and communities still face daily with respect to their livelihoods, their homes, their land, and even the basic amenities of life such as water and sewage, have dominated the minds and emotional lives of many. For them in particular, the largely practical issues that co-location has raised (transport issues, adjusting daily routines and so on) have added to an already stressful and emotional situation, rather than being the root cause of that stress and emotion. It has been for many that ‘one more thing to deal with’ in their lives. To that extent it has been difficult, and perhaps inappropriate at times, to separate ‘earthquake effects’ from the effects specifically of school co-location. For many, the two things are inexorably intertwined in their lives and in the interviews participants often spoke of them as if they were all part of the same thing.

Stress levels

Many parents and staff mentioned in interviews feeling ‘stressed’, ‘uncertain’, ‘anxious’ and the like, but this was more often than not an expression of their feelings about the general earthquake situation, or their own particular domestic circumstances, than about the co-location of their schools. When asked specifically how stressed they have been *about co-location*, 61% of staff in the survey said they have been either ‘not stressed’ or were ‘slightly stressed about it. Over a third (38%) of staff said that they have been either ‘stressed’ or ‘very stressed’ about co-location. For their part, fewer students and parents seem to have been stressed by co-location than staff. Around 80% of students and 78% of parents stated they had been either ‘not stressed’ or ‘slightly stressed’ by co-location.

Table 13: Levels of stress over co-location**Q24. How would you describe your general level of stress about site-sharing over the last few months?**

	Students		Parents		Staff	
	Host school	Guest school	Host school	Guest school	Host school	Guest school
Very stressed	6%	9%	4%	7%	9%	10%
Stressed	10%	17%	13%	19%	24%	33%
Slightly stressed	29%	41%	35%	46%	38%	34%
Not stressed	56%	34%	48%	28%	29%	23%
n=	5,465		1,597		615	

Prevalence of stress around co-location also seems to have varied among co-located schools according to three other factors. More staff, parents and students from co-located secondary schools reported being stressed than from co-located primary/intermediate schools. The number of students identifying as stressed was higher among senior secondary students than junior secondary students, and in guest schools compared with host schools. Secondary school staff in guest/afternoon schools were the demographic sub-group most likely to report being ‘stressed’ or ‘very stressed’ about co-location.

Most prominent among the co-location-related reasons given for such anxieties or stresses by staff and principals were:

- the uncertainty in many co-located schools about how long the co-locations would last, and when, or even whether, guest schools would get back to their home school site and buildings
- whether or not the guest schools in particular would be able to retain enrolment levels in 2012, when much of their catchment was ‘red’ or ‘orange’ zoned
- delays in the provision of resources or facilities such as relocatable buildings, staff toilets, fast broadband, and so on
- the ongoing but cumulative draining effects of working from temporary accommodations, having to go outside in the weather to classes (or in some cases to the toilet)
- disrupted daily routines
- lack of easy access to, or control over, teaching resources
- working intensely concentrated, and often longer days, with few breaks and little ‘setup’ time between classes.

Inter-school relationships

Governance

The principals at one site-sharing site commented on the very different way in which the boards work, saying that this had financial implications and implications for day-to-day decision making. It was suggested that the ‘Ministry come up with a standard formula for [decision making] so that it doesn’t become an issue — because it has been an issue’. It was suggested that the school boards needed to come together to deal with joint issues if the site-sharing was over a longer period than 6 months. ‘[It’s] the only way it can work, if the management of schools have as a priority making it work and keeping the relationships alive. You know there are things that the other schools did that bug the proverbial out of me, [but] you’ve just got to put that to one side and you’ve got to say to yourself ‘well this is something you have to do - you have to deal with it’.’

Governance-level decision-making about co-location was also more complicated in the case of the state integrated Catholic schools, where decisions involved a five- or six-way conversation among the two school principals, the two school boards, the Ministry of Education, and the proprietors of the schools. Memorandums of Agreement between or among sharing schools seem to have been quite quickly arranged in some cases, but were quite slow in others, with the resolution of arrangements around sharing the costs of wear and tear on the host school's plant being one of the more common areas of difficulty. Several schools expressed the view that a template from, or more direct brokering of such cost-sharing arrangements by, the Ministry of Education would have been helpful in this regard. Overall, there were few reports from principals of irresolvable governance-level issues arising from the co-locations. Most remarked on the high levels of good will that existed between respective boards and the respective schools' principals, as well as the importance of good personal relationships with the Ministry.

Staff and management

In both site-sharing and shift-sharing sites alike, the great bulk of extra workload and extra day-to-day decision-making created by co-location fell on the shoulders of the principals and their respective senior management teams. Accordingly, at all of the sites there were regular, usually weekly meetings of the managers concerned at which these decisions were made. At several site-sharing sites, administration workload and staffing was shared between the schools. At most sites, it was agreed that the host school would retain overriding responsibility for grounds, buildings, maintenance and so on with the guest school contributing to costs. At the shift-sharing sites, the administration and support staff moved to the new site and there were varying degrees of segregation and sharing of space and facilities between guest and host administration teams. On the whole, though, the sharing arrangements for administration and management sharing at the sites were felt to have worked well.

The extent to which inter-school relationships between the respective teaching staff of the schools were encouraged, varied from site to site. In some cases, and more so in the site-sharing schools than in the shift-sharing schools, the staff shared resources extensively, shared a common staffroom and in some cases undertook professional development and other activities together. At St Thomas of Canterbury College and Breens Intermediate School in particular, a policy of 'our school is your school' seemed to be prominent and both social and professional collaborations were fostered. The Heaton Intermediate principal said that it had been productive for the two groups of staff to involve themselves in social activities, and that such things had 'helped make it work well'. There were also anecdotes from other sites of handling co-location from a co-operative point of view. In one other site, for example, where the staffroom was shared, the principals and staff spoke of joining together for celebrations, looking for creative opportunities for integrating staff from the two schools. In most co-located schools, even if there were few 'whole-staff' get-togethers, meetings were regularly held between heads of faculties and the senior management teams of both schools.

However, most schools seem to have preferred to segregate their activities and continue as a separate staff as much as possible. This was reported to be in order to retain their separate identity as schools and as a school-specific community rather than a 'site' community. Particularly in the shift-sharing situations because of the split timetables, there was little opportunity for interaction between the staffs of each school, though there were some department specific exceptions. At one site, for example, the two Art departments collaborated often. Even though there were some tensions about such matters as putting posters on walls, the general feeling was described by one teacher as having 'the feeling of a flattering situation'. Originally at this site there was some suggestion that there could be opportunity for joint professional development, but in the event no time or energy was found for that. While there were exceptions, practical subjects seem to have been affected most and resource sharing was reported more often as problematic for practical subjects such as art, music, and food technologies.

It was common to hear, especially in the early days when several guest schools did not have their own administration or staffroom 'space', that there was a feeling of being the 'dispossessed [versus] those who have everything.' There were

comments about differences in school cultures with respect to students borrowing things like staplers from teachers' desks and a feeling of 'them and us' in the shared staff room, especially on Friday afternoons when host school teachers would be relaxing, and guest school colleagues had still to teach.

When asked about their general level of comfort with the choice of their partnering school and their sense of personal safety on the co-located site, the great majority of staff (90%) said they were 'comfortable' or 'very comfortable' with the choice of partnering school, and 90% said they felt personally safe at the site.

Students

The great majority of parents (89%), and students (78%) who responded to the survey said they were 'comfortable' or 'very comfortable' with the choice of partner school, and 90% of parents and 88% of students said students felt 'safe' or 'very safe'. In the case of students, however, there were some interesting variances within this apparent consensus. Perhaps as a consequence of having so much more opportunity to interact with each other, the students at site-sharing schools were more likely to report being 'uncomfortable' with the choice of partner school, and to feel less 'safe', than were students in shift-sharing schools. Though still a minority, 35% of students at site-sharing schools reported that they felt 'uncomfortable' or 'very uncomfortable' with the choice of partner school, and 22% said they felt 'unsafe' or 'very unsafe' there.

Staff at Halswell Residential College and Unlimited Paenga Tawhiti said they had experienced 'no major difficulties between students. Despite the very different natures of our respective intakes, there were not really the problems we predicted'. The Halswell Residential College staff said they were keen to be proactive and 'put processes in place before things happened'. They noted Halswell Residential College's decision to take their students out of uniform so they were not as obviously distinguishable from the Unlimited Paenga Tawhiti and Discovery One students, and that Unlimited Paenga Tawhiti and Halswell Residential College students were working together in the areas of music, Kapa Haka, PE, and outdoor education, and were running a joint theatre production. Discovery One now works more independently of the other two schools onsite since moving to the western boundary, reportedly having less contact with Unlimited Paenga Tawhiti now than it had previously when they were neighbours in the CBD.

In terms of co-location effects on relationships between the two (or in one case, three) sets of students on co-located sites, there seem to have been the same ambivalences as reported above for staff. On the one hand, students from both site-sharing and shift-sharing schools talked of enjoying socialising with their friends from other schools and of making new friends from the other school. The interviews with students in the shift-sharing schools were often with student leaders at the school who frequently spoke of a desire to connect formally with the student leaders from the other school and to plan combined events, such as cultural occasions, school plays, and dances. Some of this occurred in several of the shift-sharing schools. They also tended to regard as 'silly' or 'unnecessary', the discouragement of interaction between the bodies of students implemented by most shift-sharing schools.

On the other hand, there were also a few incidents reported of playground fights between students from the two schools in one or two sites, inappropriate graffiti comments on school desks, stone throwing at visiting school buses, anti-guest-school comments on Facebook pages, and the like. It is difficult to determine the extent to which these incidents represent a heightened or more prevalent culture of inter-school conflict in the co-located situation, or whether they are more, or less, representative of relationships between the student groups than are the examples of cooperation and friendship. The tenor of student and staff comments in the interviews, and the very high levels of comfort with the choice of partnering school and personal safety reported overall in the survey, indicate the latter rather than the former.

Within-school relationships

Staffs' professional relationships and staffroom culture

Staff at both the site-sharing sites and the shift-sharing sites who responded to the survey were more likely to report that their professional relationships had either stayed the same or changed for the better during co-location (65% and 68%

respectively), than report they had changed for the worse. More or less a third of staff at both site-sharing and shift-sharing schools said their relationships had changed for the worse. At one school, however, over half of the 15 staff who responded felt their professional relationships had changed for the worse.

One of the most obvious effects of the compression of the school day in the shift-sharing schools was the loss of opportunity for staff to gather together either for social or professional occasions. Staff meetings were reduced in frequency and time in nearly all of the schools, and nearly all staff interviewed reported a loss of professional development opportunity, a decline in 'staffroom conversations', little or no socialising with colleagues at lunchtimes or before or after school, and a significant decline in one-to-one contact (pastoral or academic) with students during the school day. Teachers at one host school, for example, talked of 'not meeting as a staff, and our PD programme has been put on hold'. As a result, they said, 'the sense of community between staff being shattered - and that was something that was never thought of'.

On the other hand, several staff also said that they felt the crisis has also brought them more together in some ways. "You read people's faces better - 'you look stressed today, can I help?'" They reported listening to each other's stories more, and said that 'a lot of people are relying on each other more'. Several thought that while formal PD had been reduced, there was more informal mentoring happening. Because the pastoral team was under more pressure, staff at one school said, they now dealt with most disciplinary problems themselves, or in collaboration with each other. There is 'a sense of 'I'll fix it myself or I'll show you how to fix it'. More staff looking after each other'. The Heaton Intermediate school principal said that their strategy of buddying the specialist teachers with generalist teachers had been 'a real positive', and had helped those teachers get to know each other and the students more. Several others mentioned that the number of social occasions, morning teas, and the like, were helping staff morale.

Staff at shift-sharing schools in particular also said that they were on the whole working longer hours, and that their work had 'intensified' significantly during co-location. In many schools senior management staff, in particular, felt that their normal duties have suffered because of the extra workload imposed by post-earthquake and co-location administrative tasks, whereas, for classroom teachers, much of this intensification was attributed to the shorter periods and lack of preparation or transition time between classes under the new timetable. Several principals commented that staff absenteeism had risen since co-location, but could not say whether this was due to the added pressure of co-location or to the earthquakes and home circumstances. Several said that they had lost at least one or two staff members directly because of the added stresses of teaching in a co-located situation. Most also commented on the extraordinary resilience of their staff in the co-located situation, their commitment to students and the fact that they were teaching under conditions that would normally be considered contrary to their employment contracts. Frequent mention was made of teaching and support staff being 'tired', 'exhausted' and 'feeling like they are running all day' as a result. Co-location 'worked' because school leaders and staff were determined to 'make it work' on behalf of their students and colleagues.

Another concern affecting staff's professional relationships is a heightened anxiety about their own job security. At the time of our interviews it was reported that some 300 Christchurch teachers, many, if not most, of them from co-located guest schools, were likely to lose their jobs at the end of the year as a direct result of the dramatically falling rolls in those schools after the earthquakes (The Press, 7 June 2011).⁴

Students' social relationships and pastoral care

All the schools reported an increase in the need for pastoral care of students to support the transition to co-location and to deal with the emotional after-effects of the earthquakes. One primary school reported that some Year 6 and 7 students are sleeping with their parents, while others were said to become very upset at any aftershocks or similar sounds and shakes at school. At other schools there were reports of some students self-harming, suffering from depression, being

⁴ www.stuff.co.nz/the-press/news/christchurch-earthquake-2011/5239043/Jobs-of-300-teachers-on-the-line

tired and stressed and fearful of earthquakes at school. Earthquake effects, however, seem more prominent among the reasons for the increase in counseling and so on, than the effects of co-location *per se*.

One school's teachers reported that they had observed their students growing in social maturity as a result of the changed circumstances. They talked of the children being more solicitous and caring of each other, more empathetic, and learning leadership skills that they would not have otherwise. Again, earthquake and co-location effects seem to work in tandem in this respect.

In the shift-sharing schools the compression and intensity of the school day was said to have significantly restricted the time available for social interaction among students. Many staff, students and parents, said they were conscious that because of co-location there had been a loss of leadership opportunity for seniors because of the curtailing of many school-wide cultural, music, drama and social events. Other social disruptions mentioned by students and parents included:

- a sense of non-completion (lack of chance to say goodbye, etc.) with respect to fellow students who had left the school or moved away from Christchurch
- a tendency to stay in their rooms when at home
- the lack of a lunch break and other serendipitous opportunities to socialise
- disrupted eating patterns
- less contact between siblings at the same school.

On the other hand, they also acknowledged that there had been a number of benefits in site-sharing with respect to their own social lives. The students in the morning schools especially, but also some in the afternoon schools, often talked of liking the shortened school day as it allowed them to attend sports practices during daylight hours, and to have more time for social activities outside school. The opportunity to 'get together with friends' may have decreased during formal school hours, but they had significantly increased outside them.

The majority (61%) of students who responded to the survey said that their relationships with friends and others at their own school had not changed substantially because of co-location, and more students (from all levels 7-13) said that relationships had changed for the better because of co-locating than said they had changed for the worse. There was a slight tendency for more senior (Year 11-13) students to report a worsening of relationships than Year 7-10 students. There was also a possible tendency for students at guest schools to report worse relationships *more* than students in host schools. Students were more likely to think their within-school social relationships had changed for the better because of co-location than their parents were.

Table 14: Students' social relationships at school**Q23. As a result of the site-sharing my/my child's relationships with friends and others at school have:**

	Students		Parents	
	Site-sharing	Shift-sharing	Site-sharing	Shift-sharing
Changed for the better	28%	23%	18%	10%
Not changed	55%	67%	61%	74%
Changed for the worse	17%	10%	21%	15%
n=	1046	4520	347	1167

	Students		Parents	
	Host school	Guest school	Host school	Guest school
Changed for the better	24%	23%	10%	13%
Not changed	71%	63%	79%	70%
Changed for the worse	5%	14%	10%	17%
n=	5,598		1,562	

Special needs education

Generally the co-located schools have been able to retain their special needs programmes and students, with the exception of Halswell Residential College. This school reduced its onsite roll significantly and relocated those students who may have been less able to cope with either the earthquake or co-location to their home communities. Most students have settled in well to their home communities and schools. Halswell has developed an outreach service that is available as the first service option for students who might be referred to Halswell.

Several of the shift-sharing schools reported that their special needs students found the changed timetable and general sense of insecurity particularly upsetting, and that they were often more emotionally affected than other students. One school found it helpful to provide a special 'minder' for special needs students on the Ministry provided buses. On the other hand, one other principal said that their special needs students have said they feel safer at school than at home, and that the school was seen as a stable emotional haven for them.

Summary**Social and professional relationships**

Though stress levels seemed high in the schools overall, this seems to be due more to other factors than co-location itself. The group most likely to report being stressed specifically by co-location was staff at the guest schools (40%).

Students were more optimistic about their social and professional relationships during co-location than were staff and parents on their behalf. Though they acknowledged less interaction with teachers and other students while at school, students in shift-sharing schools in particular seemed to like the shorter school days as it gave them more time for socialising outside of school.

There were high levels of resilience and commitment by staff, students and parents towards their particular schools, and high levels of good will between the sharing schools – their desire, as several expressed it, 'to make this work'. The guest school communities were grateful to their hosts and the host school communities were generous in their accommodation of their guests. While not without stresses and strains, it was this sense of good will towards each other and sense of sacrifice, as much as any practical systems or organisations, that made the relationships 'work' in the co-locating schools.

3.6 School Identity, culture and community connection

The final group of co-location effects emerging from the interviews with staff, students and parents were the effects on the identities and school cultures of the schools. By 'identity' we mean each school community's collective sense of its place in the world, each school's sense of itself as a body corporate, its self-defined distinctive characteristics, and the values, events, relationships and activities that together represent its 'culture' as a school and its 'place' in its wider community. For many in site-sharing and shift-sharing schools alike, the experience of co-location has served to raise awareness of, and for many to confirm their loyalty to, their distinctive identities as schools.

One of the obvious effects of co-location highlighted by interview participants was that it provides an unusual opportunity for students and communities to compare and contrast their schools' 'ways of doing things' with the ways of other schools. They talked often of becoming more self-aware as schools by virtue of being able to observe at close quarters the facilities, processes and values of one, and in some cases two, other schools. Boys' schools had to accommodate the presence of girls on their campus, high decile schools combined with low decile schools, large schools shared with smaller schools, schools with one type of 'special character' had to share with schools of another 'special character', and so on.

Arguably, the schools that had to change elements of their culture and processes most were Unlimited Paenga Tawhiti and Discovery One. In losing their unique inner city CBD sites they also lost access to their relationships with city businesses. Many at their interviews said they were pleased to have the 'green' spaces, but still felt that the site chosen was a long way from its community connection. One parent said that she felt they were left 'foundering', and were experiencing a 'lack of sense of belonging.' Such effects seem to have been particularly felt at Unlimited Paenga Tawhiti, where 69% of senior students, 58% of parents, and 64% of staff who responded to the survey said that the school had not retained its identity well under co-location. This is in stark contrast to both the other site-sharing schools and all of the shift-sharing schools, where much smaller minorities so reported.

More typical of responses from the other co-locating schools, was the feeling that school identity was being reinforced as much as, if not more than, it was being challenged by co-location. At the primary school site, Merrin Primary School and Christ the King Primary School noted that they have two groups of senior students on the one site. Both groups had expected to hold the special responsibilities and privileges of being senior students in their school, and in part the Merrin Primary School students are still able to fulfill this role. In contrast, several of their peers from the guest school felt they were missing out on the same opportunities since half of their school and many of their siblings were still located back at the home school site.

Responses at the intermediate sites were similarly variable. One principal said that they found it a challenge to share with a school with differing values at times, and that the collective nature of the combined schools was blurring the school's identity. They said they could not have gone on in the same way for much longer without it changing the basic nature of their respective schools. On the other hand, another principal said that the school values had been reinforced, and had been a useful tool to guide them through a difficult time. At that school, the schools' values were consciously used in lessons. Students worked on school values clarification activities both as a way of getting them through the earthquakes, and as a foundation for their role in welcoming and sharing with the students from the other school. In a similar counterpoint, teachers in the secondary shift-sharing schools gave examples of co-location bringing staff together and fostering an increased rather than decreased sense of internal collegiality ('we seem to have a happier ship'), as well as examples of the opposite ('the sense of community amongst the staff has been shattered'). In several of the guest schools in particular, this has recently been complicated by the announcement of significant staff redundancies and the implementation of CAPNA (Curriculum and Pastoral Needs Analysis) proceedings for next year. This has created significant job anxiety in the staffrooms of these schools.

Understandably, perhaps, many identity-related effects seem to have been felt more keenly in guest schools than host schools. Students, parents and staff at host schools were all more likely to report in the survey that their school had done well at retaining its distinctive culture and school spirit than their counterparts in guest schools.

Table 15: Retention of school identity and school spirit**Q25. How well do you think the school has retained its separate identity and school spirit while site-sharing?**

	Students		Parents				Staff	
	Host school	Guest school	Host school	Guest school	Host school	Guest school		
Very well	29%	19%	56%	39%	43%	23%		
Well	58%	62%	42%	54%	48%	56%		
Not very well	12%	19%	3%	7%	9%	20%		
n=	4,879		1,512		605			

	Students			Parents			Staff						
	Site-sharing (P/I)	Site-sharing (Sec Jnr)	Site-sharing (Sec Snr)	Shift-sharing (Sec Jnr)	Shift-sharing (Sec Snr)	Site-sharing (P/I)	Site-sharing (Sec Jnr)	Site-sharing (Sec Snr)	Shift-sharing (Sec Jnr)	Shift-sharing (Sec Snr)	Site-sharing (P/I)	Site-sharing (Sec)	Shift-sharing (Sec)
Very well	17%	13%	8%	24%	20%	41%	53%	16%	55%	44%	24%	14%	37%
Well	63%	42%	23%	53%	48%	55%	41%	26%	42%	50%	63%	21%	54%
Not very well	19%	44%	69%	9%	15%	4%	6%	58%	2%	6%	13%	64%	10%
n=	790	52	65	2303	2393	296	17	19	601	533	54	14	294

Many of the interview participants in shift-sharing sites spoke of how, overall, their school identities, and their awareness of the distinctive nature of their school had been validated or confirmed by the co-location experience, as well as being challenged in some functional respects. Co-location was said by several principals, in particular, to have helped them to appreciate their existing, distinctive school identities in a whole new way. Co-location had provided an opportunity to 'stand back' and 'take a look at ourselves' in ways they could not have done previously. Several mentioned how they had been very surprised by how pleasant their hosts' school grounds and buildings were, how there were facilities in the host schools that they wished they had, and expressed opinions both impressed and critical, on a range of things from the behaviour of the guest or host school children to the daily timetable. Moreover, most of the secondary schools, whether host or guest, have taken the opportunity to, as one principal put it, 'think more flexibly about the school day'. At the time of writing most of the co-located secondary schools have either decided to change, or are seriously considering changing, their timetables to include earlier starts, earlier finishes and shorter lunchtimes when they return to control of their own site. In surveys and interviews alike in the shift-sharing schools, the morning schools were almost universally felt to have got 'the better deal' compared to the afternoon schools in respect of most aspects of school life.

One of the key elements in determining the extent to which schools felt able to retain their identities on the shared sites related to the establishment, or not, of physical 'spaces' on the site that were exclusively for their school. Many staff in guest schools, in particular, said how important it had been for them to have their own 'space' in the new site, such as their own staffroom, administration and office space, departmental storage or workroom space. Without this sense of owning at least some physical 'space' on the site, they said that their own sense of community was somehow compromised. This seems to have been especially the case in the sites where the guest staff had to share staffroom and similar spaces, or had none at all, while awaiting the erection of relocatable buildings of their own. While one host intermediate school, and perhaps one of the host secondary schools, conceived of the co-location with another school as a chance to share virtually all aspects of their own school culture and resources, most described themselves as willing to share a common geography, without having to share or create a common culture. In this regard, several of the guest school principals, in particular, talked of feeling that the situation was 'like being a flatmate', or 'always conscious of being the 'visitor' throughout the process'. They were unanimously grateful to the host schools at the same time as they were confirmed in their belief in the distinctive natures of their own schools.

Another key element affecting identity retention or development while co-located relates to the schools' relative ability to continue a full range of extra-curricular or co-curricular activities. Ironically, perhaps, many of the activities that both host and guest schools would normally undertake in order to build this sense of distinctive identity or to inculcate students with the particular values of the school, were the very activities and events that were being curtailed in the co-located situation, especially in the truncated day at the shift-sharing schools. The shortening or cancelling of assemblies, meetings, sports fixtures, cultural clubs, whole-school drama productions, chapel time, House meetings or competitions, staff professional development activities, 'happy hours', and so on – all the activities that most built 'school spirit' and most reinforced its values – was felt to have denied each school opportunities to build its own internal culture. It was also said to have denied student leaders, in particular, and Year 13 students in general, some important opportunities for social leadership and bonding with junior students. At the other end of the school, moreover, the Year 9 students in the secondary schools, who had only had three weeks of experience of the school before the February earthquake hit, were felt to have had little opportunity to learn what the 'school is all about' and the 'way we do things'.

For want of a better term, we've got the sausage but we don't have the sizzle. All the extras that make our school unique have had to be compromised.... For us pomp and ceremony is important. We have big masses, big Old Boys' functions... we have a whole component that is around the religious things... and that has [all] been lost or compressed into a much smaller time. (Senior manager, host/morning school)

I am very impressed with the ministry setting up the sharing schools idea for my daughter. I feel very lucky that our school could stay together as a separate school. [Host school] provided a fantastic environment by providing a separate entranceway and reception area for [guest school]. The girls were made to feel very welcome and overall I think a little adversity doesn't do anyone any harm. (Parent, guest/afternoon school)

We were eternally grateful for the opportunity to share with [host school]. We have tried to promote the experience as a positive, make the most of situation and subsequently have 3 children site sharing. (Parent, guest school)

Moving and losing our school has majorly affected the school spirit, but has brought people closer together. (Student, guest school)

At the same time, many of the schools, especially after the initial settling-in period, were also encouraging cross-school collaborations, which in some ways ran counter to the general policy of segregation between host and guest schools. Across various sites, there were examples cited of the two student bodies joining forces for drama productions, musical events, sports fixtures, mufti days, meetings between the two student leaders teams, joint kapa haka activities, and so on.

Community connection

Related to the difficulties of retaining and maintaining their separate identities in co-located environments, the guest schools in particular expressed a concern about losing their connection with their parent and catchment communities as a direct result of co-location. Retention and recruitment difficulties with respect to both staff and students are being experienced, and are expected in the future, by all of the secondary schools as a direct result of co-location. Significantly falling rolls since the February earthquake were reported by most schools in Christchurch. Most co-located schools, host and guest alike, reported losing significant numbers of overseas students and significant numbers of local students from families that have migrated, temporarily or permanently, to other parts of New Zealand. There were a few instances reported of students leaving both guest and host schools specifically because of co-location. The principal of one host school reported receiving a formal delegation of parents who were seeking assurances that the compressed school day would be temporary only, and that their children would be able to get 'a full day' of tuition from the school during and after co-location. However, most students who have left seem to have done so because their families moved away from Christchurch for a variety of reasons, among which co-location was but one factor. It was rather more common for the students interviewed to say that they would consider leaving if the co-location were to remain in force after the end of the year, but the majority seemed to wish to remain enrolled at their current school whatever the circumstances. They just hoped that it would be back on their own site.

If schools' *retention* issues were less directly related to co-location than to other social factors more directly related to earthquake damaged house or land or parents' employment issues, the same seems to be less true of the guest schools' *recruitment* anxieties. One or two of the guest schools' principals were confident they would still meet their enrolment

targets for next year, but most were not. This was partly because of the expected heavy migration of families away from the 'red zoned' and 'orange zoned' suburbs in their catchment. But it was also partly because the schools were not able to necessarily assure parents of their return to their home sites or the timetable for ending their period of co-location. Several principals cited the difficulties of holding Open Days and prospective parent meetings when, as one put it 'there is no school to show off'. She thought it was ironic to be inviting prospective parents to someone else's school in order to promote her own. Such uncertainties and strains as these were heightened for many when each major aftershock meant longer and less certain predictions about how long the schools would remain co-located.

Overall, most of those interviewed regarded co-location as a workable solution in the meantime, but few saw it as sustainable in the longer term. The Principal from one host secondary school said he was proud of the support he was getting from his community about co-location and of the overriding good will of staff and the community that had made it work to date. But he also noted that in his school after a term of co-location 'the honeymoon is definitely over. The adrenaline has run out'. Another Principal from a guest afternoon school said that co-location had been a good short term fix, but not a long term solution. One parent expressed the views of quite a few teachers, students and other parents, when she said that they could "tolerate co-location till the end of the year; but if it were to continue next year I would move to another school". As one teacher from a host/morning school put it: 'I love *why* we are doing this, and *how* we are doing this. But don't let anyone think it is sustainable'.

Summary

School identity and culture

The effects of co-location on the identities and cultures of the schools have been somewhat double-edged in nature. On the one hand, co-location with another school, combined with relocation from one physical site to another (often to a very different school in an unfamiliar neighbourhood), the compression of the school day into fewer hours, and the curtailing of many co-curricular activities, seems to have decreased the opportunity for co-located schools to build and consolidate their distinctive cultures and identities during the year. In particular, Year 9 students at the secondary schools, who had just joined the school when the earthquake hit, have had less chance to become familiar with the culture of the school, and Year 13 students have had less opportunity to lead its development

On the other hand, co-location has also provided an unusual opportunity for students and communities to compare and contrast their schools' 'ways of doing things' with the ways of other schools. Students, parents and staff spoke of becoming more self-aware as schools by virtue of being able to observe at close quarters the facilities, processes and values of one, and in some cases two, other schools. For example, boys' schools had to accommodate the presence of girls on their campus, high decile schools combined with low decile schools, large schools shared with smaller schools, and schools with one type of 'special character' had to share with schools of another 'special character'. For the most part this has resulted in the schools feeling a greater sense of their unique identities and their affiliation to their particular community.

Many of the shift-sharing schools have, or are actively considering changing their normal timetable as a result of the co-location experience. The preferred changes consist of starting earlier and finishing earlier in the day than before, with shorter breaks between classes.

Most feel that co-location has been for the most part successful as a short term fix to an unprecedented situation, but few feel that such co-location is sustainable in the longer term. Anxieties about longer term sustainability are especially great among those schools that are likely to continue co-location arrangements beyond the end of the current academic year.

4. Information and communication systems

Several principals in the interviews talked of some of the ICT (Information and Communication Technologies) issues that had arisen in respect of co-location. We also interviewed the consultant employed by the Ministry to assist the co-located and other earthquake-affected schools in restoring and managing their ICT infrastructures.

The ICT-related issues faced by co-located schools largely reflects the combined impact of the earthquakes and the co-location arrangements.

Administrative records and student tracking

There was a wide range of immediate ICT challenges that the co-located schools faced following the February earthquake, primarily around their disaster recovery processes for data, their ability to restore backed-up data and, for the guest schools, getting their two school ICT systems functioning together on the new site. The extent to which IT issues were problematic varied widely between schools. Some schools, for example, had practised disaster recovery plans in place for their data and records, while others did not. Some schools, mostly guest schools, lost servers in the earthquake, or could not access their servers for several weeks after schools had reopened as they were still in red-stickered buildings. Some schools in this situation were able to access backups because they were held offsite or in the cloud, while others that had their backups on servers onsite could not. At Linwood High School and Unlimited Paenga Tawhiti, for example, the servers and/or their backup servers were damaged or inaccessible in the 'red zone' for some time. At all of the guest sites, teachers' laptops, support staff administration computers, and many student computers were also inaccessible in the initial stages of co-location. The net effect of this was that some of the guest schools did not have access to student records, class lists, family contact details, mailing lists and many teaching resources for some time after the reopening of the schools on their new sites, and thus had difficulties informing parents about co-location arrangements.

A second issue facing some host and guest schools related to the merging of the two respective networks and the technical compatibility between the respective schools' network protocol systems. While some schools had fast broadband access others did not. Likewise, wireless network capability was not present in all schools. At Cashmere High School, for example, the two schools' students had to have access to the same computers at different times of the day while co-located, but each school had very different network configurations and different access protocols. The project manager seconded by the Ministry to support the integration of IT systems in the co-located and other schools stated that the quality of school infrastructure available at the schools was variable prior to the earthquake, and that the emergency in general has highlighted the importance of reliable broadband and the ability to deploy wireless rapidly on a site in order to address some of those IT infrastructure issues. Telephone systems were re-established in the schools quite quickly after co-location, and at the time of the study most sites' networks had been successfully merged. However, two of the guest schools reported that they did not yet have sufficient broadband speed to provide internet access to classes. Cost-sharing arrangements for internet connections were also reported as problematic at some co-located sites.

Communications

Another major use of ICTs in the co-located schools has been for communication and information flow, both within the schools and between the schools and their communities. For within-school communications, and in order to gain access to internet services, the establishment of wireless networks in co-located schools was usually a priority, as wired alternatives are impractical in such circumstances.

In terms of schools communicating effectively with their communities, traditional media such as telephone systems and radio broadcasts were supplemented in a few co-located schools by an increased use of social media applications. The Facebook page set up by the parents of Unlimited Paenga Tawhiti, for example, allowed parents to contribute and comment on a wide range of issues they were facing in the first few uncertain weeks. It was noted by several schools, though, that home ownership of PC hardware and broadband access is lower in the eastern suburbs, and that power was out in some of them for some time. Most schools, therefore, used the telephone systems, newspaper announcements and periodic updates of their websites to inform parents of progress in reopening. Only a few said they used texting, radio or other means of giving out information that were not dependent on households having mains power.

Use of Twitter, Facebook and other social media offering two-way communications was also reported among students, but use of social media to facilitate communication between co-located schools and communities was reportedly rare. Among the co-located schools, Unlimited Paenga Tawhiti set up a Facebook page, and Merrin Primary School initiated a Twitter account for all their parents to alert them quickly in the event of an earthquake. This has proved very useful and Merrin's site-sharing partner school has since taken up the idea.

While parents generally felt fairly well informed by the co-locating schools, there was some criticism in the interviews of a lack of communication by some schools. The parents' critiques centred around the frequency of communications on the one hand, and the variety of the media used to communicate with parents on the other. In a disaster situation, they said, parents' hunger for information increases, at the same time as their means of getting it become less varied. Power was out for a week or more in some of the suburbs, and it could not be assumed that the majority of households in the eastern suburbs had internet access or even landline phones. For many, their main means of accessing information was their cell phone or their battery driven radio. The parents wanted the schools to produce daily bulletins and updates. Even if there was nothing new to report, several said, then *that* should be reported. They also wanted the schools to communicate through as many different channels as possible, not just the school website but blogs, mass emails, mass texts, tweets, Facebook walls and comments, newspaper classifieds, and radio bulletins as well.

I do feel that [guest school] were very bad at communicating with parents. Maybe a facebook or twitter site may help with sending quick information. (Parent, guest school)

Families were kept well informed via the school website. (Parent, host school)

Although the school website kept us very well informed about general issues there was no communication with school through any on-line forums such as facebook or the school site for teachers to set study expectations - parents can only make kids do what we know about. (Parent, host school)

Very helpful that school relaxed its cell phone rules to allow parents to communicate with their kids. (Parent, host school)

Summary

Information and communication technologies

There was a range of ICT challenges faced by several of the co-locating schools, many related to failures of backup systems and lack of access to student records in damaged building and the like.

Co-location and the earthquakes generally showed the importance of maintaining constant communication between schools and their communities through as many media as possible.

Some schools used social media to good effect in maintaining communications with parent communities, but use of on-line alternatives for teaching and learning was sporadic rather than typical among the schools.

5. Conclusions

The overall finding of the study is that co-location has been generally received as a viable and workable option for schooling in circumstances such as those created by the Christchurch earthquakes. It was not seen by respondents as educationally ideal, and probably as not sustainable as a mid-term to long-term option, but on the whole it was seen to be working well in the shorter term (up to a year) and given the circumstances. Co-location was seen among the host school communities as a valuable way in which they could help out in a crisis, and, among the guest school communities, as valued assistance for which they were grateful. The good will that exists between the respective partner school communities is significant, and many noted that it was the presence of such good will and the professional commitment of the respective principals and staffs that has 'made it work'.

In terms of the issues that arose for students, parents and staff, co-location seems to have been less problematic for the site-sharing primary and intermediate school communities than for the secondary schools, all but one of which have been shift-sharing. Among the shift-sharing secondary schools it seems to have been less problematic for the host/morning schools than among the guest/afternoon schools. The most frequently mentioned problems associated with co-location for students, parents and staff in the shift-sharing schools, relate either to the disruptions to families' transport arrangements and daily routines caused by the earlier or later start-finish times, or to anticipated negative effects on senior students' NCEA performance of the compression of the school day and loss of teaching time over the year. Other issues of significance raised by parents in shift-sharing schools were concerns about their children's safety and security when commuting to or from school in the dark or during the now extended periods of time they spend unsupervised at home and/or alone, and the increased financial burden that many experienced as a result of co-location. In respect of many of these issues, the host/morning schools were almost universally seen as having had a more positive experience than the guest/afternoon schools.

Many students, parents and staff were experiencing stress at the time of the study, but it appears that co-location itself has been more a compounding factor on top of the stress occasioned by the earthquakes and resulting domestic or occupational circumstances, than the root cause itself. The reported emotional impacts of school co-location seem less significant than those caused by the earthquakes themselves, and seem to be greater among parents and staff than among students.

The combined effect of three to four weeks of school closures following the earthquakes, the loss of up to five hours of teaching time per week, and the shortening of class period times to 40-45 minutes each has had an impact on the curriculum. For example, a reduction in the number of NCEA credits attempted by some senior students in co-located schools, a reduced number of curriculum topics covered in many subjects, and adoption of more time-efficient and teacher-centered, forms of pedagogy by some teachers. While there was consensus among teachers that these latter changes in teaching methods have occurred, and that lessons have become more efficient, there was much less consensus as to whether they have become more effective in terms of student achievement.

Many co-curricular activities were cancelled or curtailed, particularly in shift-sharing schools, and during the first few months of co-location. Most schools since, however, have made efforts to restore co-curricular activities for students, especially sports, and albeit at a reduced level compared to before the earthquakes and co-location. As a result of this and the general loss of in-school time, many in the shift-sharing schools feel that building or maintaining school spirit and identity has been problematic, especially for Year 9 and Year 13 students. On the other hand, the feeling was also expressed in several co-located schools that co-location has brought out the best in many pupils and has confirmed as much as it has challenged both the parents' commitment to their particular school and the schools' commitment to their

particular communities. The great majority of students, parents and staff alike felt that the schools have retained their identities and cultures quite well during co-location.

Perhaps the other main high-level finding of the study is that the schools and the Ministry itself did identify some positive lessons to come out of the experience. Most co-located schools reported a heightened awareness of, and commitment to, their existing identity and values; some learned the value of certain facilities and processes that their partnering schools had but they did not; and most too, saw an opportunity to reflect deeply on and consider aspects of their previous school lives that they had to some extent taken for granted. Among these reflections and re-considerations, perhaps the most obvious for the shift-sharing secondary schools has been their reconsideration of the shape of the school day as a result of the compressed and adjusted start-finish times implemented during co-location. At least four of the secondary schools have already changed, or are seriously considering changing, their daily timetables on a permanent basis as a direct result of the co-location experience. At the end of their co-location several of the schools have kept, or moved to, earlier start/finish times and shortened breaks within the school day.

Lessons learned at the governance and disaster management level include the importance of the Ministry providing consistent and constant key messages to schools especially in the period immediately following a disaster, and developing a set of guidelines for the co-location of schools in such events (for example, templates for agreements on cost-sharing for wear and tear). Operationally, the establishment of a special disaster recovery team within the Ministry was felt to have been a successful strategy, as was providing a single point of contact through which to channel negotiations and decisions between the schools and the Ministry. Maximising local authority and localised decision-making in such circumstances was a key theme in the retrospectives on co-location of Ministry officials and school principals alike, as was the need for, and value of, providing extra administrative staffing and mentoring support for the principals involved.

For the schools themselves, the experience of co-location reinforced the importance of co-located 'guest' schools having some 'spaces' of their own at the site, such as a separate administration and staffroom block, as well as the need to retain as many co-curricular activities as possible and their value in building and maintaining a sense of school culture. After some initial problems, the bus systems now seem to work well, at least for those students living relatively close to their original school's location. Students feel personally safe in the co-located environments, though perhaps less so while commuting to and from school in the dark during the winter months. Some schools installed security lighting, employed security guards, provided torches and high-viz vests to students and encouraged them to have cell phones on them at all times. One or two co-located schools took the opportunity to share professional development and other inter-staff activities during co-location, while others took advantage of the opportunity that co-location provided students to do subjects at the partnering school that were not normally offered by their own school.

Fewer students seem to have been stressed by co-location than their parents or teachers, and students were generally more optimistic about the effects of changes in the teaching timetable, their performance, attitude, and social relationships. Most students in the primary and intermediate schools, and the junior classes of the secondary schools, felt that their learning had not been significantly compromised by co-location, though anxieties in this respect were significant among many in the senior secondary schools. Where they were introduced in some of the secondary schools, double periods were generally seen as a successful way of dealing with the particular time pressures created for practical subjects by shortened periods during shift-sharing. Many students, particularly those in the morning schools, liked the shortened school day and the chance it offered to attend sports practices and social events during daylight hours.

6. Evaluation approach and methodology

The research questions as specified in the evaluation plan for the study were:

1. How have co-location models operated in these schools to date? and
2. What, to date, have been the impacts of the co-location or relocation of schools on students, families, teachers and schools?

It was implied that the study should result in some general statements as to what has been learned from the experience to date, and how effective co-location has been as a strategy to deal with situations such as that created by the Christchurch earthquakes.

Such questions implied a mixed methodology approach that combined qualitative interviews with a largely quantitative survey of all school participants. Therefore, we implemented a two-stage research process in which the first stage was a series of individual or group interviews with participants and stakeholders across all the schools involved, followed by a whole-population participant survey of the schools’ managers, teachers, students and families. The first of these provided qualitative data outlining the range or scope of various effects or impacts of co-location/relocation from the perspectives of the communities involved, while the second provided statistical data on how typical or generalisable those effects were for a range of particular demographic groups (males-v-females; host-v-guest schools, teachers-v-students, and so on).

Table 16: Timeline

Late May	June - Early July	Late July - August	September
<ul style="list-style-type: none"> • Finalise evaluation plan • Contact schools • Ethical approvals and consents 	<p>Interviews</p> <ul style="list-style-type: none"> • ‘Access visits’ to schools • Begin focus group Interviews • Preliminary analysis of interview data. 	<p>Interviews</p> <ul style="list-style-type: none"> • Detailed qualitative analysis of interview data 	<p>Draft & Peer Review Report</p>
		<p>Survey</p> <ul style="list-style-type: none"> • Prepare survey questionnaires • Distribute questionnaires • Survey data entry & statistical analysis 	

A team of four CORE Education researchers led the study, each taking particular responsibility for data gathering and the relationship with the schools at one or two sites. Each researcher conducted the focus groups and implemented the survey at their designated school sites, and each contributed to the development of the survey questionnaire items. Final data analysis and the writing of the report was the responsibility of the project director.

Three researchers from the Research and Evaluation section of the Ministry of Education assisted the CORE Education researchers in conducting the interviews. They also assisted with the preliminary analysis of the interview data and with the construction of the parent, student and staff survey questionnaires.

Sampling – interviews

Group interviews took place in all schools, both host and guest. For the most part, the group interviews were with up to four participants/stakeholders at a time, held face to face at the host schools' sites. At one or two schools some interviews were with individuals rather than groups and some parent interviews were conducted by telephone audio-conference. Separate interviews were held for the following in each school:

Individual Interview:	Principal
Group interview:	Senior management
Group or individual interview:	Teachers
Group or individual interview:	Students (1-2 from the junior classes of high schools and 1-2 from the senior classes)
Group or individual interview:	Parents (2-4 drawn from a convenience sample of parents contacted through the PTA or the Board of Trustees)

Membership of the interview groups was a matter of negotiation with each school Principal, but was based on the principle of establishing a group likely to express the widest range of possible impacts and opinion.

Other interviews conducted with key stakeholders included two group interviews with local Ministry of Education personnel, an interview with the consultant contracted to the Ministry to support earthquake-affected schools with their IT systems, and an interview with a former principal at one of the schools contracted as a support person for the principals of earthquake-affected Christchurch schools.

Interviews were conducted in all but one of the co-located schools. The principals of three of the schools felt it was not appropriate at the time to interview students and/or parents, but interviews were held in these schools with the principal and staff.

Sampling – surveys

A short, 26-item questionnaire was developed on the basis of the interview data, and distributed to staff, students and families in all of the co-located schools (see Appendix). For all except the primary schools involved, a whole-population approach was taken and questionnaires were distributed to all staff, students and parents in the schools. At Christ the King Primary School only certain classes were co-located, so the survey was distributed only to the staff, students and parents of the class levels directly involved in the co-location (ie, Years 6-8 classes).

The questionnaire was made available in both paper and on-line formats. The great majority of respondents chose to complete the paper version.

Survey response rates

One secondary school declined the invitation to take part in the survey, although representatives took part in all the interviews. Halswell Residential College felt it would be inappropriate to give the questionnaires to their parents and students given the special character of the school, but staff were invited to respond.

Students and staff were given questionnaire sheets to complete on a given day, while parents were asked to return their questionnaires to the school within a week of receipt.

The total numbers of valid responses from each group was 633 staff, 6,061 students and 1,632 parents. Based on July 1 school rolls and staffing schedules where known, we estimate the overall response rates to be approximately 60% for the staff survey, 17% for the parent survey, and 63% for the student survey.

Appendix. Survey Questionnaires: Students, Parents, Staff



Site-sharing Schools in Christchurch STUDENT SURVEY

This survey is designed to help researchers at CORE Education provide the Ministry of Education with information about schools that have had to share a site with another school in Christchurch as a result of the February 2011 earthquake.

Individual responses will be anonymous and kept confidential to the research team at CORE Education. The overall results of the research will be presented in a report to the Ministry of Education and presented to the schools involved in October 2011.

IF YOU HAVE INTERNET ACCESS YOU MAY COMPLETE THE SURVEY ONLINE AT: <http://www.surveymonkey.com/s/coloc-student>

IF NOT, PLEASE COMPLETE THIS FORM & RETURN IT TO YOUR TEACHER OR PLACE IT IN THE BOX AT SCHOOL RECEPTION

This is a survey about the **effects to date of schools sharing a site together**. Please answer by thinking only about your time *site-sharing with another school*.

1. Your school's name:	
2. Is/was it a Host' or 'Guest' school?	<input type="checkbox"/> 'Host' school <input type="checkbox"/> 'Guest' school
3. Your role	<input type="checkbox"/> Student <input type="checkbox"/> Other
4. Your gender	<input type="checkbox"/> Female <input type="checkbox"/> Male
5. Year level	<input type="checkbox"/> 7-8 <input type="checkbox"/> 9-10 <input type="checkbox"/> 11-13 <input type="checkbox"/> NA (Not applicable)
6. Your ethnicity	<input type="checkbox"/> European <input type="checkbox"/> Māori <input type="checkbox"/> Pasifika <input type="checkbox"/> Asian <input type="checkbox"/> Other
7. Daily total travel time to and from school while site-sharing? (ADD 'to school' & 'from school' times together)	<input type="checkbox"/> 0-30 mins <input type="checkbox"/> 30-60 mins <input type="checkbox"/> 1-2 hrs <input type="checkbox"/> 2-3 hrs <input type="checkbox"/> Over 3 hrs

For each of the questions 8-12 & 15-25, please tick only ONE box. (NA = Not applicable)

8. How difficult is/was it getting to and from school while site-sharing?
 Very difficult Difficult No different to before Easier than before No opinion/NA
9. How satisfied are/were you with changes to the start-end times of the school day? (**Secondary only**)
 Very satisfied Satisfied Neutral Dissatisfied Very dissatisfied NA
10. How satisfied are/were you with changes in the length of your class periods? (**Secondary only**)
 Very satisfied Satisfied Neutral Dissatisfied Very dissatisfied NA
11. How satisfied are/were you with the shared site's facilities (For example, buildings, grounds, classrooms, toilets, equipment, etc.)?
 Very satisfied Satisfied Neutral Dissatisfied Very dissatisfied No opinion/NA
12. Have your personal finances been directly affected by the site-sharing arrangement? (eg: lost or gained a part time job, cost of travel increased or decreased, more/less pocket money etc.)
 Yes, negatively affected Not affected Yes, positively affected No opinion/NA
13. **How** have you **mainly** used your morning/afternoon non-classroom time? (**Secondary only**)
 (Tick **any** of the following that apply)
 Doing homework/study Going out with friends Sport or cultural activities

14. **Where** have you **mainly** spent your morning/afternoon non-class time? (**Secondary only**)
(Tick **any** of the following that apply)
 At home with others At home alone At school
 At a study centre or activity hub NA Other: Please specify [_____]
15. As a result of site-sharing my **behaviour** at school:
 Improved Did not change Deteriorated No opinion/NA
16. As a result of site-sharing my **academic performance** at school:
 Improved Did not change Deteriorated No opinion/NA
17. As a result of site-sharing my **motivation and attitude** to schoolwork has:
 Improved Did not change Deteriorated No opinion/NA
18. As a result of site-sharing my **attendance** at school:
 Improved Did not change Deteriorated No opinion/NA
19. During site-sharing teaching methods and activities in my classes:
 Changed for the better Did not change Changed for the worse No opinion/NA
20. How personally safe do/did you feel while site-sharing with another school? (Either getting to and from school or during the school day itself)
 Very safe Safe Unsafe Very unsafe No opinion/NA
21. How comfortable are/were you with the choice of the school you site-shared with?
 Very comfortable Comfortable Uncomfortable Very uncomfortable No opinion/NA
22. As a result of site sharing our family relationships have:
 Changed for the better Not changed Changed for the worse No opinion/NA
23. As a result of site sharing my relationships with my friends and others at school have:
 Changed for the better Not changed Changed for the worse No opinion/NA
24. How would you describe your general level of **stress about site-sharing** in the last few months?
 Very stressed Stressed Slightly stressed Not stressed No opinion/NA
25. How well do you think the school retained its separate identity and school spirit while site-sharing?
 Very well Well Not very well No opinion/NA
26. If you are a Year 11,12, or 13 student, how have your expectations concerning NCEA changed as a result of site-sharing (Tick **any** of the following that apply)
 I will enter for fewer Standards I expect to achieve lower grades in Standards
 I am studying harder to catch up / more motivated I am studying less hard / less motivated
 I am more anxious about NCEA than normal No opinion/NA
 Other: Please specify [_____]
27. Any further comments you would like to make about site-sharing or the issues raised above?

Thank you for completing the survey!

If you have any queries or comments regarding the research, please contact:
 Dr. Vince Ham, CORE Education Ltd, P O Box 13678 , Christchurch



Site-sharing Schools in Christchurch PARENT SURVEY

This survey is designed to help researchers at CORE Education provide the Ministry of Education with information about the impacts to date of the site-sharing arrangements made for some schools in Christchurch as a result of the February 2011 earthquake.

Individual responses will be anonymous and kept confidential to the research team at CORE Education. The overall results of the research will be presented in a report by CORE Education to the Ministry of Education and in presentations to the schools involved in October 2011.

IF YOU HAVE INTERNET ACCESS PLEASE COMPLETE THE ONLINE VERSION AT: <http://www.surveymonkey.com/s/coloc-parent>

IF NOT, PLEASE COMPLETE THIS FORM AND RETURN IT WITHIN A WEEK TO THE BOX AT RECEPTION AT YOUR CHILD'S SCHOOL

This is a survey about the **effects to date of schools site-sharing** after the February earthquake. Please answer with respect to your experience of the time *site-sharing with another school*.

Please complete **ONE** form about **ONE** child, even if more than one is/was at a site-sharing school

1. Your school's name:	
2. Is/was it a 'Host' or 'Guest' school?	<input type="checkbox"/> 'Host' school <input type="checkbox"/> 'Guest' school
3. Your role	<input type="checkbox"/> Parent/Caregiver <input type="checkbox"/> Other
4. Your gender	<input type="checkbox"/> Female <input type="checkbox"/> Male
5. Year level of student	<input type="checkbox"/> 7-8 <input type="checkbox"/> 9-10 <input type="checkbox"/> 11-13 <input type="checkbox"/> NA (Not applicable)
6. Your ethnicity	<input type="checkbox"/> European <input type="checkbox"/> Māori <input type="checkbox"/> Pasifika <input type="checkbox"/> Asian <input type="checkbox"/> Other
7. Your child's Daily total travel time while site-sharing? (ADD 'to school' & 'from school' times together)	<input type="checkbox"/> 0-30 mins <input type="checkbox"/> 30-60 mins <input type="checkbox"/> 1-2 hrs <input type="checkbox"/> 2-3 hrs <input type="checkbox"/> Over 3 hrs

For each of questions 8-12 & 15-25, please tick only ONE box. (NA = Not Applicable)

8. How much are/were your own daily transport and travel arrangements affected by site-sharing?
 Greatly disrupted Slightly disrupted No different Made easier No opinion/NA
9. How satisfied are/were you with the start-end times of the school day while site-sharing?
 Very satisfied Satisfied Neutral Dissatisfied Very dissatisfied No opinion/NA
10. How satisfied are/were you with any changes in the lengths of teaching periods? (**Secondary only**)
 Very satisfied Satisfied Neutral Dissatisfied Very dissatisfied No opinion/NA
11. How satisfied are/were you with the arrangements made regarding the shared site's property and facilities (For example, the buildings, grounds, teaching spaces, equipment, resources etc.)?
 Very satisfied Satisfied Neutral Dissatisfied Very dissatisfied No opinion/NA
12. Has site-sharing directly affected your personal finances? (eg: cost of travel higher/lower etc.)
 Yes, negatively affected Not affected Yes, positively affected No opinion/NA
13. **How** has your child **mainly** used their morning/afternoon non-classroom time? (**Secondary only**)
 (Tick any of the following that apply)
 Doing homework/study Going out with friends Sport or cultural activities
 Personal leisure activities NA Other: Please specify [_____]

14. **Where** has your child **mainly** spent their morning/afternoon non-class time? **(Secondary only)**
 (Tick **any** of the following that apply)
 At home with others At home alone At school
 At a study centre or activity hub NA Other: Please specify [_____]
15. As a result of site-sharing my child's **behaviour at school**:
 Improved Did not change Deteriorated No opinion/NA
16. As a result of site-sharing my child's **academic performance** at school:
 Improved Did not change Deteriorated No opinion/NA
17. As a result of site-sharing my child's **motivation and attitude** to schoolwork:
 Improved Did not change Deteriorated No opinion/NA
18. As a result of site-sharing my child's' **attendance** at school:
 Improved Did not change Deteriorated No opinion/NA
19. As a result of site-sharing teaching methods in my child's classes:
 Changed for the better Did not change Changed for the worse No opinion/NA
20. How personally safe does/did your child feel in the site-sharing environment?
 Very safe Safe Unsafe Very unsafe No opinion/NA
21. How comfortable are/were you with the choice of partnering school?
 Very comfortable Comfortable Uncomfortable Very uncomfortable No opinion/NA
22. As a result of site sharing our **family relationships**:
 Changed for the better Did not change Changed for the worse No opinion/NA
23. As a result of site sharing my child's **social relationships (with friends etc)** at school:
 Changed for the better Did not change Changed for the worse No opinion/NA
24. How would you describe your general level of stress about site-sharing over the last few months?
 Very stressed Stressed Slightly stressed Not stressed No opinion/NA
25. How well do you think the school retained its separate identity and culture while site-sharing?
 Very well Well Not very well No opinion/NA
26. Any further comments you would like to make about site-sharing or the issues raised above?

Thank you for completing this survey. We appreciate the attention you have given it.

If you have any queries or comments regarding the research, please contact:

Dr. Vince Ham, CORE Education Ltd, P O Box 13678 , Christchurch

Email: vince@core-ed.org Tel (03) (379 6627)



Site-sharing Schools in Christchurch STAFF SURVEY

This survey is designed to help researchers at CORE Education provide the Ministry of Education with information about the impacts to date on staff, students and parents of the site-sharing arrangements made for some schools in Christchurch as a result of the February 2011 earthquake.

Individual responses will be anonymous and kept confidential to the research team at CORE Education. The overall results of the research will be presented in a report by CORE Education to the Ministry of Education and in presentations to the schools involved in October 2011.

IF YOU HAVE INTERNET ACCESS YOU MAY COMPLETE THE SURVEY ONLINE AT: <http://www.surveymonkey.com/s/coloc-staff>

IF NOT, PLEASE COMPLETE THIS FORM AND PLACE IT WITHIN A WEEK IN THE BOX AT SCHOOL RECEPTION

This is a survey specifically about the **effects of the co-location or site-sharing of schools** in Christchurch. Please answer with respect to your own experience of *the site-sharing of your school*, rather than, for example, with respect to the effects of the earthquakes themselves.

1. Your school's name:	
2. Host or Guest school?	<input type="checkbox"/> 'Host' school <input type="checkbox"/> 'Guest' school
3. Your role	<input type="checkbox"/> Support staff <input type="checkbox"/> Teaching staff <input type="checkbox"/> Principal/SMT <input type="checkbox"/> Other
4. Your gender	<input type="checkbox"/> Female <input type="checkbox"/> Male
5. Year level(s) taught	<input type="checkbox"/> 7-8 <input type="checkbox"/> 9-10 <input type="checkbox"/> 11-13 <input type="checkbox"/> NA
6. Your ethnicity	<input type="checkbox"/> European <input type="checkbox"/> Māori <input type="checkbox"/> Pasifika <input type="checkbox"/> Asian <input type="checkbox"/> Other
7. Your Daily Total commuting time while site-sharing? (ADD average 'to school' & 'from school' times together)	<input type="checkbox"/> 0-30 mins <input type="checkbox"/> 30-60 mins <input type="checkbox"/> 1-2 hrs <input type="checkbox"/> 2-3 hrs <input type="checkbox"/> Over 3 hrs

For each of questions 8-12 & 15-26, please tick only ONE box. (NA = Not Applicable)

8. How much are/were your own daily transport and travel arrangements affected by site-sharing?
 Greatly disrupted Slightly disrupted No different Made easier No opinion/NA
9. How satisfied are/were you with changes in the times of day you are at school? (**Secondary only**)
 Very satisfied Satisfied Neutral Dissatisfied Very dissatisfied No different/NA
10. How satisfied are/were you with any changes in the length of teaching periods? (**Secondary only**)
 Very satisfied Satisfied Neutral Dissatisfied Very dissatisfied No different/NA
11. How satisfied are/were you with the arrangements made regarding the shared site's property and facilities? (For example, the buildings, grounds, teaching spaces, equipment, resources etc.)
 Very satisfied Satisfied Neutral Dissatisfied Very dissatisfied No opinion/NA
12. Has site-sharing directly affected your personal finances? (cost of travel increased/decreased etc.)
 Yes, negatively affected Not affected Yes, positively affected No opinion/NA
13. **How do/did you mainly use your morning/afternoon non-classroom time?** (**Secondary only**)
 (Tick **any** of the following that apply)
 School administration/meetings etc Personal leisure activities
 Lesson preparation and marking Extra teaching (eg: study support, sport coaching)

14. **Where** do/did you **mainly** spend your morning/afternoon non-class time? (**Secondary only**)
(Tick **any** of the following that apply)
 At home At school At a study centre, activity hub or sports ground.
 NA Other: Please specify { _____ }
15. As a result of site-sharing students' **behaviour** at school generally:
 Improved Did not change Deteriorated No opinion/NA
16. As a result of site-sharing students' **academic performance** at school generally:
 Improved Did not change Deteriorated No opinion/NA
17. As a result of site-sharing students' **motivation and attitude** to schoolwork generally:
 Improved Did not change Deteriorated No opinion/NA
18. As a result of site-sharing students' **attendance** at school generally:
 Improved Did not change Deteriorated No opinion/NA
19. In the site-sharing situation my teaching methods and approach in class:
 Changed - More effective Changed – Neither more nor less effective
 Did not change Changed - Less effective No opinion/NA
20. How personally safe do/did you feel in the site-sharing environment?
 Very safe Safe Unsafe Very unsafe No opinion/NA
21. How comfortable are/were you with the choice of your site-sharing school?
 Very comfortable Comfortable Uncomfortable Very uncomfortable No opinion/NA
22. As a result of site-sharing our family relationships:
 Changed for the better Did not change Changed for the worse No opinion/NA
23. As a result of site-sharing my professional relationships at school:
 Changed for the better Did not change Changed for the worse No opinion/NA
24. How would you describe your general level of stress about site-sharing?
 Very stressed Stressed Slightly stressed Not stressed No opinion/NA
25. How well do you think the school retained its separate identity and culture while site-sharing?
 Very well Well Not very well No opinion/NA
27. How would you rate the allowances NZQA has made regarding NCEA assessments in site-sharing schools? (Secondary only)
 Excellent Good Adequate Poor No opinion/NA
26. How would you rate the Ministry's performance in supporting site-sharing schools?
 Excellent Good Adequate Poor No opinion/NA/Don't know
28. Any further comments you would like to make about site-sharing or the issues raised above?

Thank you for completing this survey!

If you have any queries or comments regarding the research, please contact:
 Dr. Vince Ham, CORE Education Ltd, P O Box 13678, Christchurch
 Email: vince@core-ed.org Tel (03) (379 6627)