

Analysing the Performance of Low, Middle and High Achieving Students

Research reviewed by McGee et al (2003) found that students with low achievement prior to coming to secondary school may find it harder to keep up with the work requirements at secondary school. We were interested in finding out whether this was the case for the low achieving students in our sample. In this chapter we examine changes in the mathematics, reading and writing scores of students who, for the purposes of this report, we have broadly categorised as low, middle or high achievers.

Students have been broadly categorised as low, middle or high achievers based on their Phase 4 (Year 10) asTTle scores.

In order to look more closely at the achievement of particular groups of students we needed to cluster them in some way. There were a number of ways we could have done this but we decided to look at the students' achievement in the final phase of the study (Phase 4) and then, for each subject, assign students to either the lower quartile, the middle half, or the top quartile, based on their scores for the particular subject. This then enabled us to track each group's performance back over the previous phases to see

whether any noticeable shifts in achievement had occurred within and between groups³⁰.

Students' scores within each of these groups have been graphed across the four phases of the study for each subject. The main purpose of the graphs is to give the reader an overall sense of how students' achievement within each group varied over the course of the study. Although the graphs do track the achievement of individual students the size of them limits the extent to which this can be achieved.

Points to note

- The numbers of students per quartile are not exactly the same due to some students' achievement scores being tied.
- When students' scores were at the bottom or top of a particular quartile group a relatively small change in their scores could result in movement between the quartiles.
- We acknowledge that some variation in student's achievement scores may be associated with their motivation, health and individual focus on the particular day of testing.
- The numbers of students grouped as high or low achievers in mathematics, reading and writing are small so care needs to be taken when interpreting the results.
- Although there is some discussion of the performance of students who were achieving in the middle half of all students, most of the analyses reported in this document focus on comparisons between the students in the bottom and top quartiles.
- For mathematics, there were 25 students in the bottom quartile, 41 students in the middle half and 19 students in the top quartile. For reading, there were 26 in the bottom quartile, 40 in the middle half and 21 in the top quartile. And in writing, there were 21 in the bottom quartile, 37 in the middle and 19 in the top quartile.
- In Year 8, the schools students attended represented a range of deciles: decile 1 (N=1), decile 2 (N=2), decile 3 (N=1), decile 4 (N=1), decile 7 (N=1) and decile 9 (N=2). While a school's decile indicates the extent to which the school draws its students from low socioeconomic communities, not all students who attend low decile schools are necessarily from low socioeconomic backgrounds, for example. In the following analyses, we look at students' achievement by the decile of the schools they attended in Year 8 simply to determine if there are any apparent differences.

³⁰ We adopted a similar approach to the one used by researchers involved in the Competent Children, Competent Learners study to track students' performance over time. Refer Hodgen, E. (2007) for further details.

Tracking the mean achievement scores of students in the middle half and top and bottom quartiles

Figure 6 tracks the mean achievement scores of students in the top and bottom quartiles and in the middle half at each of the four phases of the study.

Achievement patterns in mathematics

The mean score for students in the top quartile for mathematics showed that, on average, students in this group experienced a much higher rate of progress between Phases 2 and 3 than other students.³¹

By contrast, the pattern of mathematics achievement for students in the lower quartile is of particular concern. Despite an increase in their mean score between Phases 2 and 3, after the initial drop between Phases 1 and 2, they experienced a further drop in achievement at Phase 4. This meant that the mean score for lower quartile students was no higher in Year 10 than it was in Year 8.

Achievement patterns in reading

The mean achievement patterns in reading for the middle half of students and students in the lower quartile were similar at each phase of the study.

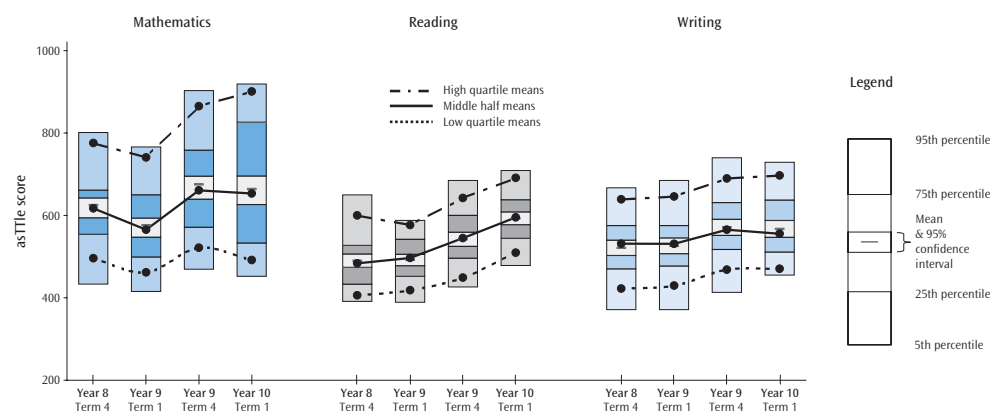
But contrary to what one might expect, perhaps, between Phase 1 and Phase 2 there was a drop in the mean performance of students achieving highest scores in reading. This drop in achievement, however, was short-lived, with these students generally experiencing a higher rate of progress in reading between Phases 2 and 3 than other students.

Achievement patterns in writing

Within each achievement grouping, students' progress in writing was relatively similar, although the mean of the top quartile group increased slightly more than the means for the middle group or lowest quartile between Phases 3 and 4.

The mathematics achievement for students in the bottom quartile is of particular concern.

Figure 6: Tracking the mean scores of students in the top quartile, middle half and bottom quartile



³¹ Both of the secondary schools in our study operated some class streaming in Years 9 and 10, based on students' numeracy and literacy skills, which may have influenced this result.

Students in the bottom quartile for mathematics

Nine students were consistently in the bottom quartile for mathematics when they were assessed at each of the four phases.

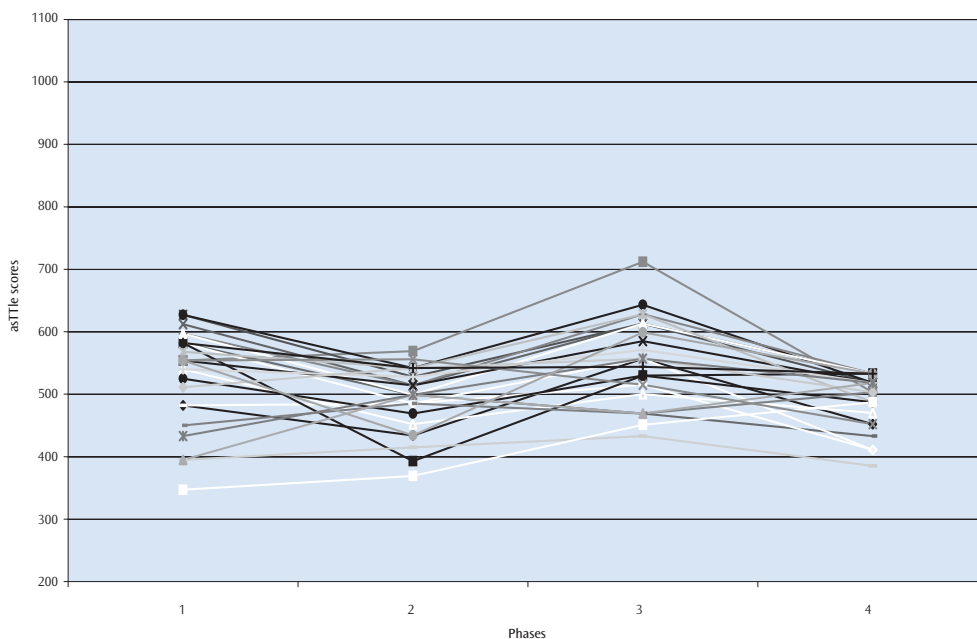
Figure 7 plots the progress of students whose asTTle mathematics scores were in the bottom quartile in Phase 4. Of the 25 students achieving in the bottom quartile, over half (N=15) had also been achieving in the bottom quartile in Phase 1. The achievement of the remaining 10 students in the bottom quartile had changed from Phase 1 when they had been achieving in the middle half. Nine students were consistently in the bottom quartile at each of the four phases when they were assessed (5 girls, 4 boys).

Pasifika students were slightly more likely to be in the bottom quartile for mathematics than students

from other ethnic groups. Nine of the low achieving students identified as Pasifika, six identified as New Zealand Māori, five as New Zealand European/Pakeha, while five students were in the 'other nationality' grouping. The majority (72%) of students in this bottom quartile had attended either decile 1 (N=4) or decile 2 (N=14) schools in Year 8. Four of the lowest achieving students, however, had attended decile 9 schools.

Students in the lowest achieving group for mathematics generally tended to have fewer books in their homes than the high achieving students (as at Phase 1) and over the course of the study were less likely to indicate reading as something they often liked to do in their spare time.

Figure 7: Progress of students whose asTTle mathematics scores were in the bottom quartile in Phase 4 (N=25)



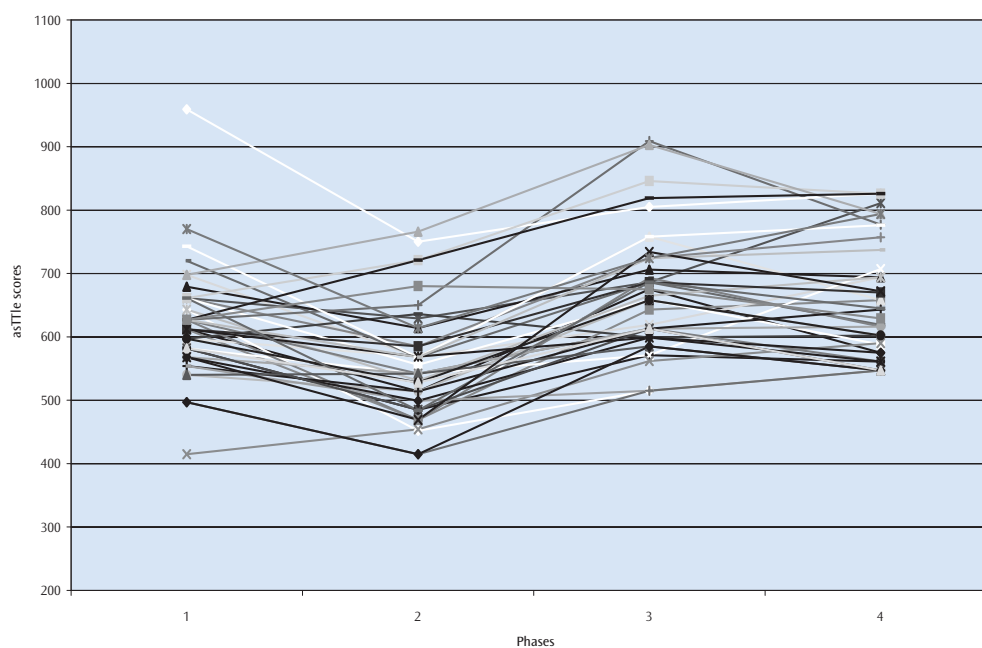
Note: As stated in the introduction to this chapter, the purpose of this figure and the following ones of the same nature is to give an overall sense of how students' achievement within each group varied over the course of the study.

Students in the middle half for mathematics

Almost half (N=41) of students scored in the middle half of our overall sample for mathematics in Phase 4. Two-thirds (N=27) had also scored in the middle half in Phase 1, with 14 of these students consistently achieving in the middle half over the course of the study. Seven students in the middle half in Phase 4 had been in the bottom quartile in Phase 1, while a further seven students had been achieving in the top quartile in Phase 1. Figure 8 tracks the asTTle mathematics scores for this group of students.

Of the students who were achieving in the middle half, 13 identified as New Zealand European/Pakeha, 12 as Pasifika, eight as New Zealand Māori and a further eight as 'other nationalities'. These students were slightly more likely to have attended deciles 1–3 schools (N=23) in Year 8, with the remaining students attending decile 9 (N=10), decile 7 (N=5) and decile 4 (N=3) schools.

Figure 8: Progress of students whose asTTle mathematics scores were in the middle half in Phase 4 (N=41)



Students in the top quartile for mathematics

Students in the top quartile for mathematics seemed to have more consistent patterns of achievement than other students.

Around a fifth (N=19) of participating students achieved in the top quartile for mathematics in Phase 4 (see Figure 9). These high achievers appeared more consistent in their achievement patterns than others, with 13 of them also achieving in the top quartile in Phase 1. The remaining six students had improved their performance from Phase 1 when their scores were in the middle half. Ten students scored consistently in the top quartile in all phases of the study (4 girls, 6 boys).

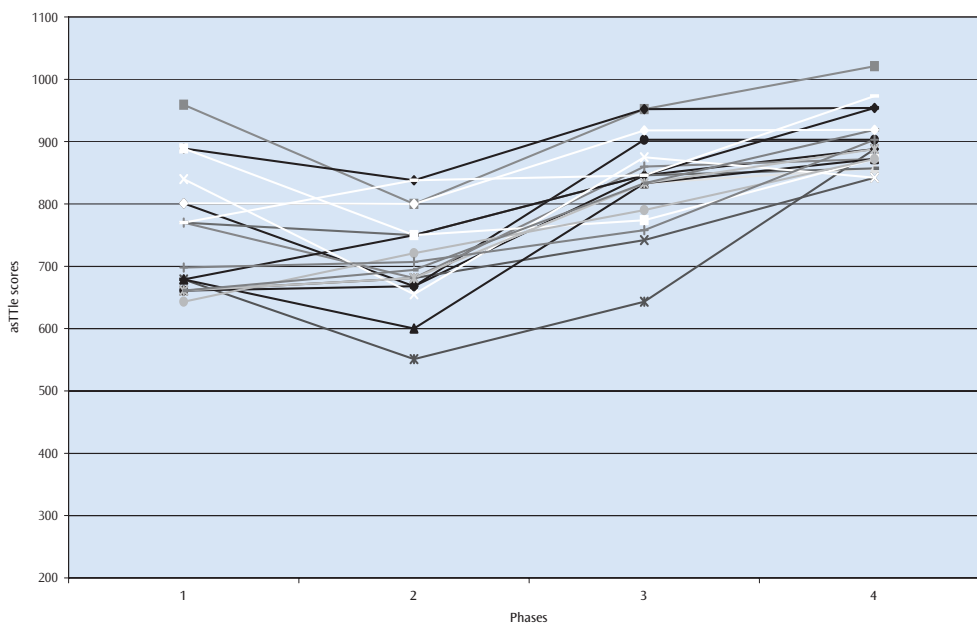
Over two-thirds (N=13) of the students achieving in the top quartile for mathematics in Phase 4 were New Zealand European/Pakeha. The remaining six students identified as New Zealand Māori (N=4) or 'other nationalities' (N=2).

No Pasifika students scored in the top quartile for mathematics.

Although just over half (N=10) of high achieving students had attended a decile 9 school in Year 8, the remainder had gone to a primary or intermediate school in Year 8 with a decile rating of between 1 and 4.

When we looked at students' mathematics achievement by gender we found that equal proportions of boys and girls were achieving in the bottom and top quartiles in Year 8 (Phase 1). By Year 10, however, boys were slightly more likely than the girls to score in the bottom and top quartiles.

Figure 9: Progress of students whose asTTle mathematics scores were in the top quartile in Phase 4 (N=19)



Students in the bottom quartile for reading

Figure 10 details the progress of the 26 students whose asTTle reading scores were in the bottom quartile in Phase 4. Half (N=13) of these students had also been in the bottom quartile in Phase 1, with 10 of the students consistently achieving in the bottom quartile in all four phases (7 boys, 3 girls). Four of these students were from families where English was not their first language.

The performance of the other half (N=13) of students who were achieving in the bottom quartile in Phase 4 had dropped from the end of Year 8 (Phase 1) when they had been achieving in the middle half of all students.

Over half (N=14) of these low achieving students in reading identified as Pasifika, which meant that this ethnic grouping was over-represented in the bottom quartile for reading. The remaining students in the lowest quartile were either New Zealand European/Pakeha (N=5), New Zealand Māori (N=3) or from other ethnic groups (N=4).

Students whose achievement in reading was in the bottom quartile in Phase 4 were more likely to

have attended lower decile primary or intermediate schools in Year 8 (62%). Conversely, the same proportion (62%) of students who achieved in the top quartile had attended decile 9 schools.

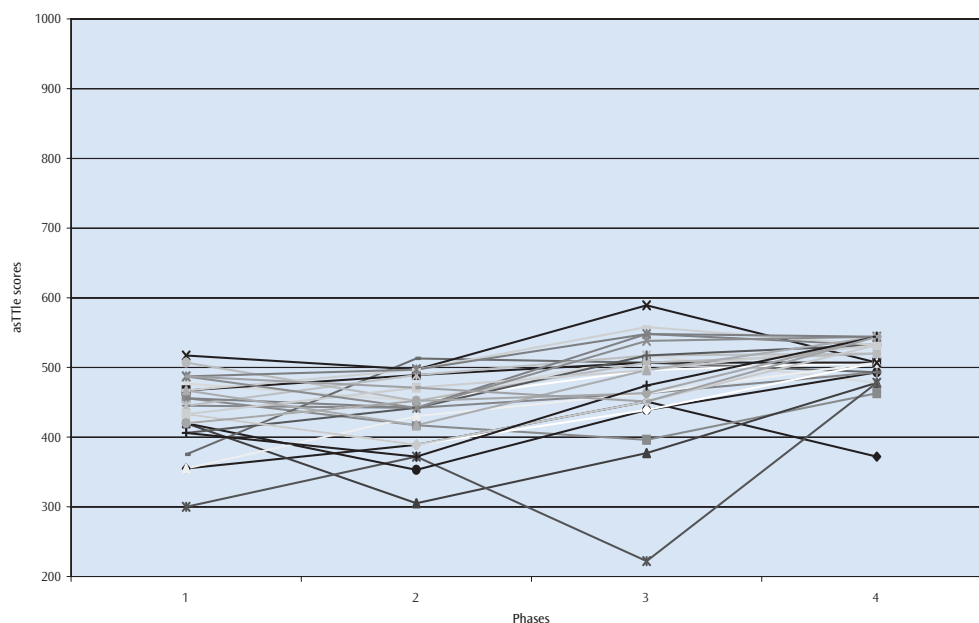
We also found that the students who were low achievers in reading reported fewer books in their homes (as at Phase 1) than their high achieving counterparts and were less likely to read for fun or interest on a regular basis.

Although in Phase 4 around half of both the high and low achievers in reading said they watched television most days, overall, the low achieving students watched television more frequently than the high achievers.

Whereas the majority of the high achieving students in reading watched television for one to two hours or less on average each day, less than half (N=12) of the low achievers watched television at an equivalent level. Half (N=13) of the low achievers in reading watched television for three hours or more.

The Competent Children, Competent Learners Study³² found that students who watched a lot of television had lower average achievement scores in reading.

Figure 10: Progress of students whose asTTle reading scores were in the bottom quartile in Phase 4 (N=26)



Note: The student who scored 222 for reading at Phase 3 of the study (above) completed the assessment in pencil and the marker found the student's answers extremely difficult to read. Consequently, very little of the assessment could be scored.

Students in the middle half for reading

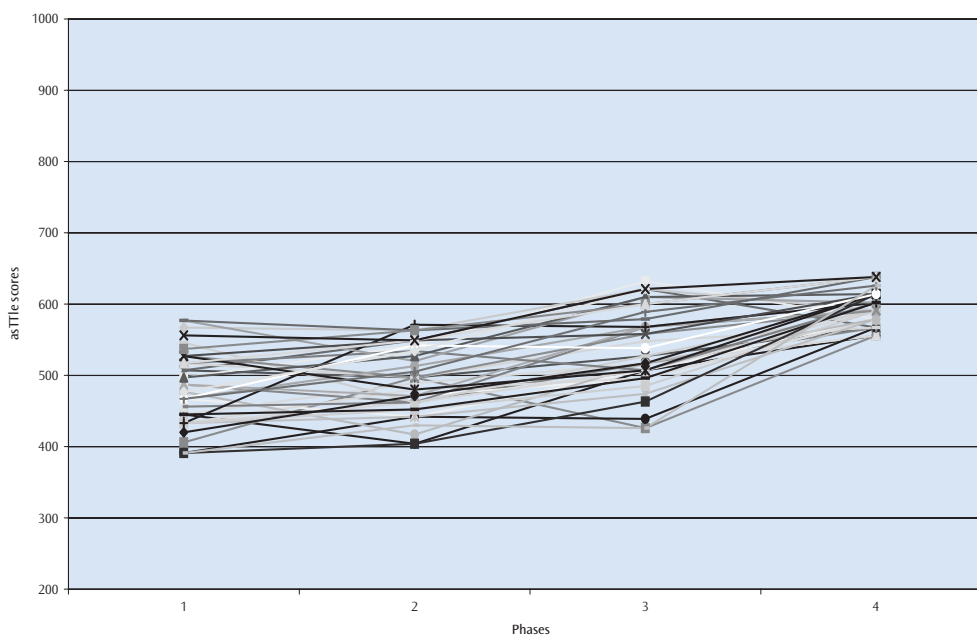
Of the 40 students who were achieving in the middle half of all participating students for reading in Phase 4, just over half (N=24) had also scored in the middle half in Phase 1 (see Figure 11).

Six of the remaining students who were achieving in the middle half had been in the top quartile in Phase 1, while a quarter (N=10) had been in the bottom quartile in Phase 1. Thirteen students remained in the middle half at each phase (9 boys, 4 girls).

The ethnicity of students in this middle half was fairly evenly spread. Twelve students identified as New Zealand European/Pakeha, 11 as New Zealand Māori, 10 as Pasifika and seven as 'other nationalities'.

Students achieving in the middle half for reading in Phase 4 represented all of the primary and intermediate schools that the students had been enrolled at in Year 8. However, half (N=20) had attended either a decile 1 or decile 2 school in Year 8 and a further quarter (N=10) had attended a decile 9 school.

Figure 11: Progress of students whose asTTle reading scores were in the middle half in Phase 4 (N=40)



Students in the top quartile for reading

Twenty-one students scored in the top quartile for reading in Phase 4. Two-thirds (N=14) of students also achieved in the top quartile in Phase 1, with around half (N=11) of these consistently achieving in the top quartile in each of the data collection phases (7 girls, 4 boys). As was the case in mathematics, the high achievers in reading were more consistent in their achievement across the phases than others. Seven students who were in the highest achieving quartile in Phase 4 had been in the middle half in Phase 1. Figure 12 plots the reading progress of these students.

Almost three-quarters (N=15) of the students who scored in the top quartile for reading in Phase 4 identified as New Zealand European/Pakeha. Two students who identified as New Zealand Māori, one as

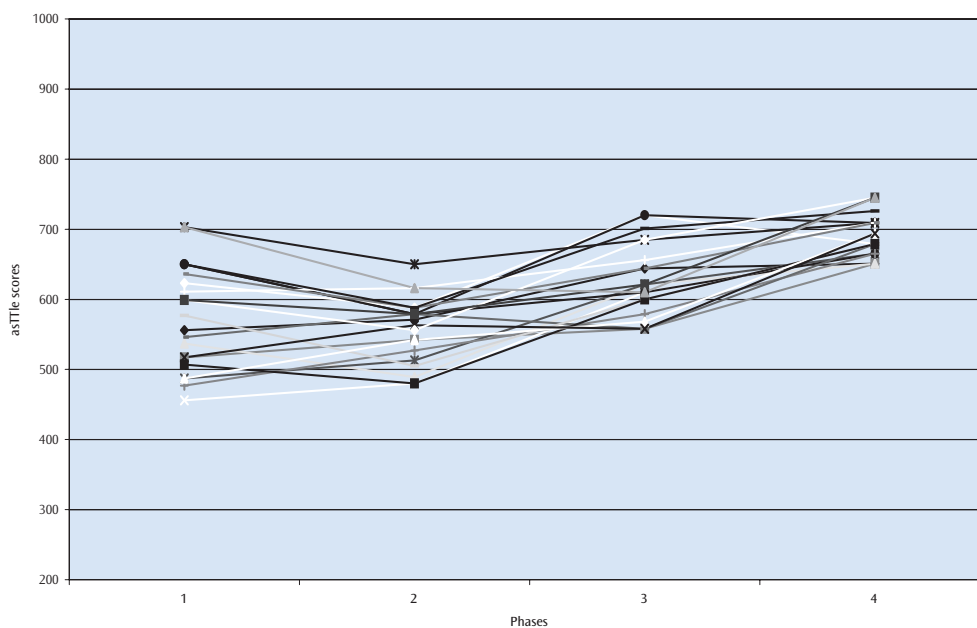
Pasifika and three students in the 'other nationality' grouping were also in the highest quartile.

Well over half (N=13) of these high achieving students had attended decile 9 schools in Year 8. But four of the 21 high achieving students had gone to decile 1 or decile 2 schools.

The number of students in our overall sample is relatively small and when analysed by high, middle and low achievement groupings the numbers in each group are even smaller. Caution is therefore needed when generalising any of the findings. Keeping this in mind, we found that when we looked at the reading levels of students in each achievement group by gender the proportion of girls achieving in the bottom quartile in Phase 4 increased slightly from Phase 1, whereas the proportion of low achieving boys decreased slightly between Phase 1 and Phase 4.

As was the case in mathematics, the high achieving students in reading were more consistent in their achievement across the phases than other students.

Figure 12: Progress of students whose asTTle reading scores were in the top quartile in Phase 4 (N=21)



Students in the bottom quartile for writing

Ten of the 21 students who were in the bottom quartile in Phase 4 for writing were also in the bottom quartile in Phase 1.

The remaining 11 students in the bottom quartile for writing in Phase 4 had been in the middle half in Phase 1.

Six students were consistently in the bottom quartile at each of the phases (5 boys, 1 girl). When we looked more closely at the background of these six students we found that four had been born outside New Zealand, with three having lived in New Zealand for three years or less. As well, a language other than English was the main language spoken in three of their homes.

Figure 13 tracks the progress of students in the bottom quartile for writing.

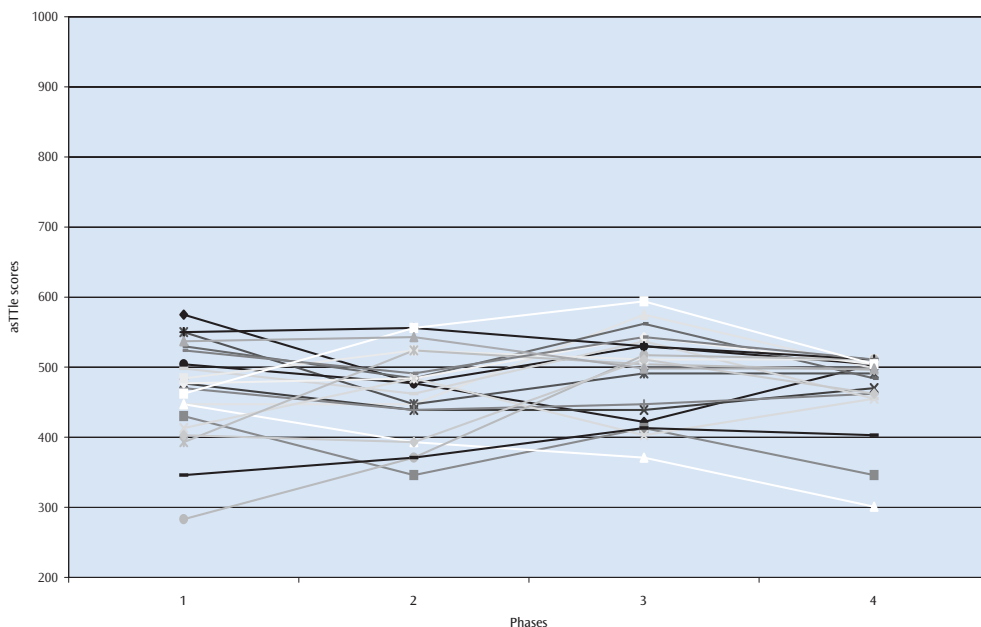
Similar numbers of Pasifika (N=8) and New Zealand European/Pakeha (N=7) students were achieving in

the bottom quartile for writing in Phase 4. Smaller numbers of New Zealand Māori (N=3) and students from 'other nationalities' (N=3) were also in this low achieving group for writing.

Although over half of the students (N=12) who achieved in the bottom quartile in writing had gone to decile 1 or decile 2 schools in Year 8 they were less likely to have attended low decile schools than those students who were low achievers in either mathematics or reading. Four of the low achieving students in writing had attended decile 9 schools.

We found that over the four phases of the study the low achieving students in writing (N=16) were more likely than the high achievers to indicate television watching as something they mostly did in their spare time and, generally, these students watched more hours of television than the high achievers. The low performing students were less likely (N=10) to indicate reading as something they mostly did in their spare time and they tended to have fewer books in their home.

Figure 13: Progress of students whose asTTle writing scores were in the bottom quartile in Phase 4 (N=21)



Students in the middle half for writing

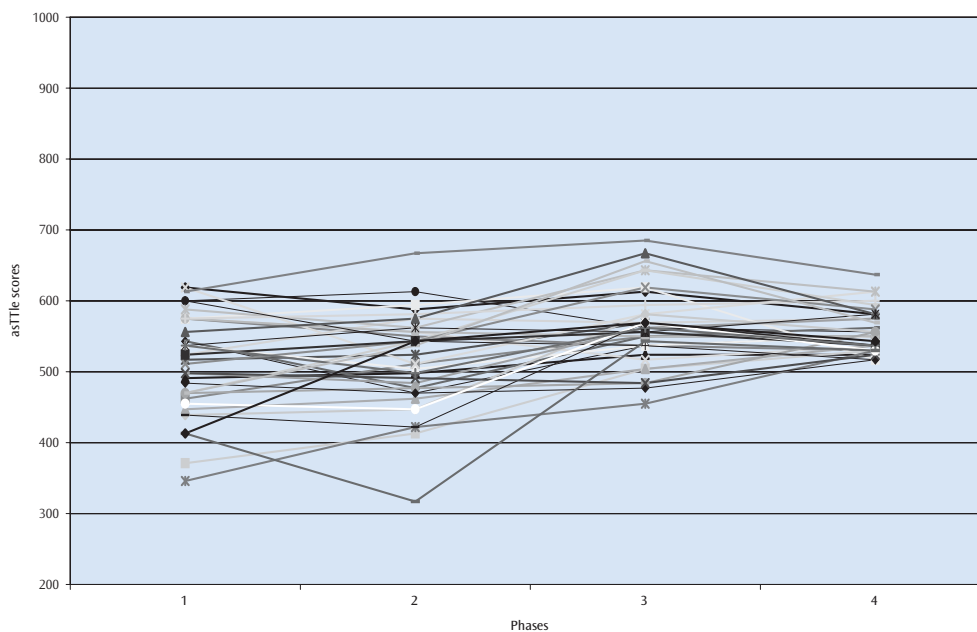
Thirty-seven students scored in the middle half in Phase 4. Half (N=19) had also been in the middle half in Phase 1, with 11 of the students remaining in the middle half at each assessment phase.

Six students in the middle half in Phase 4 had shifted from the top quartile in Phase 1. A further 12 students had progressed from the bottom quartile in Phase 1 to the middle half in Phase 4 (see Figure 14).

In terms of ethnicity, this middle group of students was made up of 12 New Zealand European/Pakeha students, 10 Pasifika students, eight New Zealand Māori students and seven students from other ethnic groups.

Of the 37 students who were achieving in the middle half, around 40 percent (N=16) had attended low decile schools (deciles 1 and 2) in Year 8 while around 30 percent (N=11) had attended decile 9 schools. The remaining students had been at decile 3 (N=5), decile 4 (N=3) or decile 7 (N=2) schools in Year 8.

Figure 14: Progress of students whose asTTle writing scores were in the middle half in Phase 4 (N=37)



Students in the top quartile for writing

Progress of the 19 students whose asTTle writing scores were in the top quartile in Phase 4 is plotted in Figure 15. Almost half (N=9) had also scored in the top quartile in Phase 1. The remaining 10 students in the top quartile in Phase 4 had progressed from the middle half in Phase 1.

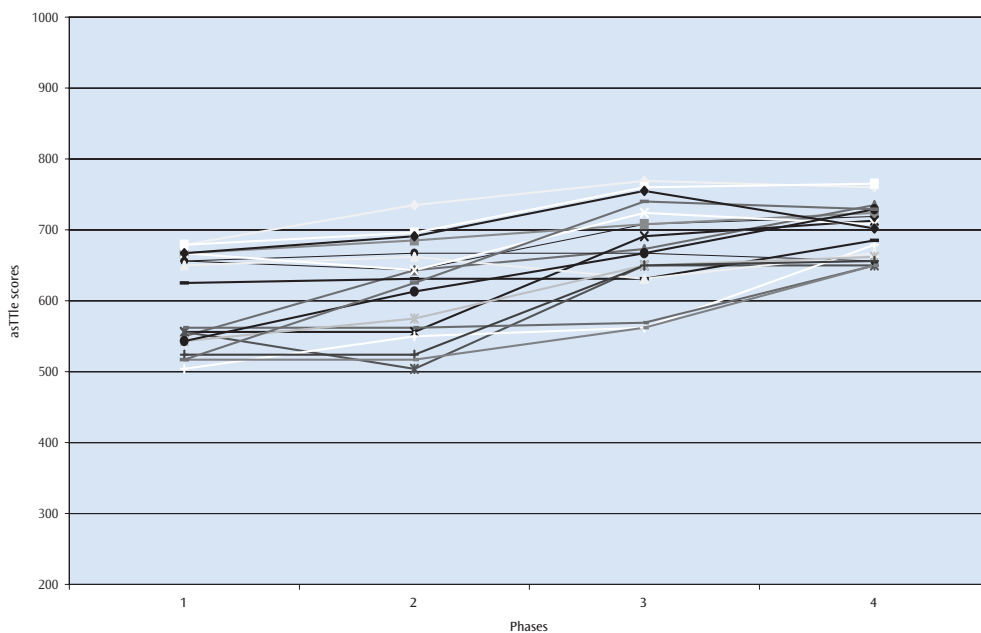
Seven students were consistently in the top quartile for writing each time they were tested over the course of the study (5 girls, 2 boys).

Around half (N=9) of the high achieving group identified as New Zealand European/Pakeha. Small numbers of New Zealand Māori (N=4), Pasifika (N=3) and 'other nationality' grouping (N=3) students were also achieving in the top quartile in Phase 4.

Although a number of the high achieving students in writing (N=8) had attended decile 9 schools in Year 8, they were less likely to have attended high decile schools than those students who were achieving in the top quartile in reading and mathematics. Five high achieving students had gone to decile 2 schools, five to a decile 4 and one to a decile 7 school.

The girls in our study performed better than the boys in writing across all four phases. Girls were more likely than boys to be achieving in the top quartile in Phase 4 while the boys were more likely to be in the bottom quartile during this phase. These results are in line with other studies³³ which show that girls' writing skills, on average, are higher than boys' across all years of schooling.

Figure 15: Progress of students whose asTTle writing scores were in the top quartile in Phase 4 (N=19)



³³ Satherley, P. (2006).

Summary of the achievement of low, middle and high achieving students

Key Points

- Students' scores fluctuated as they moved from Year 8 to Year 9 and into Year 10. However, no students' scores improved or declined to such an extent that they moved across two achievement groupings.
- Students who were high achievers in Phase 4 were more likely to have been high achievers in Phase 1. Similarly, students who were low achievers in Phase 4 were more likely to have been low achievers in Phase 1.
- There was a widening of the achievement scores between the high and low achievers in all subjects during their first year at secondary school.
- High achieving students, on average, progressed at a much faster rate than other students in mathematics and reading during Year 9.
- High achievers in reading were likely to also be high achievers in writing.
- High achieving students were more likely to read in their spare time.
- High achievers in reading and writing watched fewer hours of television than the low achievers.

It is evident from the brief analysis in this chapter that students' scores fluctuated, to a greater or lesser degree, as they progressed from Year 8 to Year 9 and then into Year 10. While some students' scores moved either up or down from one grouping to another (e.g. from the lower quartile to the middle half) no students' scores improved or declined to such an extent that they moved across two achievement groupings (e.g. from the lower quartile to the top quartile) over the course of the study.

We found that students who were achieving in the top quartile for mathematics, reading and writing in Phase 4 were more likely to have also been achieving in this quartile in Phase 1. Around two-thirds of students in reading and mathematics, and around half in writing, were in the top quartiles for these subjects in Phase 4 and also in Phase 1. Furthermore, around half of the high achieving students in each of mathematics and reading consistently achieved in the top quartile across all four phases of the study.

Students in our study who were high achievers in reading were also generally higher achievers in writing. Likewise, high achievers in mathematics were more likely to do well in reading. However,

high achievement in mathematics did not necessarily mean that students would have high achievement in writing.

We found that the mean score in mathematics and reading of the higher performing students increased more substantially than those for other students during their first year at secondary school (between Phase 2 and Phase 3) and that there was a widening of the achievement scores between the higher and lower achieving students over the same period in all subjects. There was also a further widening of students' scores in mathematics between Phases 3 and 4.

Of particular concern was that the students who were achieving in the bottom quartile in mathematics and writing showed the lowest rate of progress between Phases 3 and 4 compared with other students over the same period.

It was also evident that half or more of the students in the bottom quartile for mathematics, reading or writing in Phase 4 had also scored in the bottom quartile in Phase 1. In addition, a considerable number of these low achieving students remained in the bottom quartile over all four phases. This was

the case for 10 students in reading (out of a total of 26), nine students in mathematics (out of 25) and six students in writing (out of 21).

Pasifika students were over-represented in the bottom quartile for reading.

The Pasifika students in our sample were over-represented in the bottom quartile for reading. In contrast, three-quarters of the students in the top quartile for reading in Phase 4 identified as New Zealand European/Pakeha. The achievement scores of the Māori students in our sample tended to generally fall in the middle half of all students for all three subjects. However, a number of Māori students achieved in the bottom quartile for mathematics (N=6).

If reading scores are indicative of overall student achievement³⁴ then Pasifika students are at particular risk of falling further behind in their schooling. International studies with a national component such as TIMSS³⁵, PISA³⁶ and PIRLS³⁷ indicate that Pasifika students in New Zealand are over-represented among students achieving below national norms and expectations and are the lowest achieving ethnic group in reading comprehension, mathematics and science.

We also found that our Pasifika students were slightly more likely to be in the bottom quartile for mathematics than students from other ethnic groups and no Pasifika students scored in the top quartile for mathematics.

High achieving students were more likely to read in their spare time.

Students achieving in the bottom quartile in mathematics, reading and writing in Phase 4 were more likely to have attended low decile (deciles 1 or 2) primary or intermediate schools in Year 8. This was particularly the case for mathematics.

In reading, the proportion of low achieving students who had attended decile 1 and 2 schools was the same as the proportion of high achieving

students who had attended decile 9 schools in Year 8. Students in the top quartile for reading were more likely to have attended a decile 9 primary or intermediate school than students in the top quartile for mathematics or writing.

High performing students in mathematics, reading and writing in our study were more likely than the low achievers to indicate reading as something they did in their spare time. The Programme for International Student Assessment (PISA 2000)³⁸ also found that students who had a greater interest in reading generally achieved better results than those who had less interest.

In terms of watching television, the high achievers in reading and writing generally watched fewer hours of television than the low achievers. But there was very little difference in the viewing hours of the high and low achieving students in mathematics.

The following case study features Dana³⁹, a student whose mathematics and reading scores were consistently in the bottom quartile over the four phases of the study. Her story is not unique and echoes a number of the issues raised in the *Strengthening Education in Mangere and Otara Evaluation*.⁴⁰

Dana's case study demonstrates the importance of passing on accurate information about students' strengths and weaknesses between the sectors so that students are taught at the appropriate level. It also highlights how important it is for teachers to provide accurate information on students' academic progress to parents so they are in a better position to support their child and are able to communicate with the school more effectively for the benefit of the student.

³⁴ McGee et al (2003).

³⁵ Trends in International Mathematics and Science Study (TIMSS).

³⁶ Programme for International Student Assessment (PISA).

³⁷ Progress in International Reading Literacy Study (PIRLS).

³⁸ PISA 2000 was the first cycle of an international study commissioned by the OECD to assess the knowledge and skills of 15-year-old students in reading literacy, mathematical literacy and science literacy. The focus of the 2000 survey was reading literacy. New Zealand was one of 32 countries that took part.

³⁹ This is not the student's real name (nor is it the name of any other student in our study). As well as the name change, we have altered certain identifying details about the student in the interests of preserving anonymity.

⁴⁰ Appendix B in the evaluation report: Lita's Story.

Dana

Dana enjoyed going to school, enjoyed almost all of her subjects and had aspirations to train as a computer programmer when she finished school. Although some of her friends mucked around in class Dana was always very well behaved and got on well with her teachers. Both Dana and her parents thought she was doing well at school but the reality was that she was achieving well below many of her peers, despite always trying her best.

She was very quiet and reserved and one of her teachers commented that being so quiet could be hindering her progress as she was reluctant to ask for help or seek guidance in the classroom. In a busy classroom environment she was likely to give teachers the impression that she understood and was keeping up with the rest of the class when in fact she needed further help. Some research⁴¹ has found that, particularly in classes where there is a strong emphasis on academic achievement, students who lack confidence in their own ability to complete the work required are the least likely to ask the teacher for assistance.

How Dana viewed her learning

In Year 8, Dana felt she was best at mathematics, writing and art. At secondary school she still thought she was best at mathematics and English and also now included graphics and computing to her list of subjects she did best at. When we asked her why she thought she was best at these subjects she told us that she achieved good marks in her tests, that her teachers told her how well she was doing in them and that her parents thought she was good at these subjects.

At each phase of the study Dana consistently mentioned that she found some of her subjects, particularly mathematics, too easy and would like the work to be harder and more challenging. She also felt that she was given too little homework and that much of it was also too easy.

How teachers viewed Dana's learning

The teachers' assessments of Dana's ability over the course of the study, as well as our asTTle results, paint a different picture of Dana and would tend to suggest that she was not coping as well with her schoolwork as she, and her parents, thought she was.

Dana's Year 8 teacher felt she had made some very good progress during her final year at primary school and considered she was of average ability in reading and writing but below average in mathematics. Although Dana had received extra help during the year in language and mathematics, which had helped to improve her language work, her teacher felt that she would continue to struggle with mathematics in the future. Despite Dana always trying her best, this teacher felt she was unlikely to achieve any qualifications at secondary school or beyond.

Likewise, her Year 9 mathematics teacher rated her overall ability in mathematics as below average and identified that she had learning needs in this subject. While she had made some progress during the year and liked the subject, she was still achieving below average in relation to the other students in her class. Our asTTle results support this teacher's assessment of Dana, showing she was consistently achieving in the bottom quartile over the four phases of the study. Her mathematics teacher was also pessimistic about Dana's achievement longer term, stating that she was unlikely to gain any secondary school or tertiary qualifications in the future. Despite her Year 8 class teacher and her Year 9 mathematics teacher identifying Dana as having learning difficulties in mathematics, it appears there were no mechanisms in place to provide any additional support for her at secondary level. Her parents also appeared unaware that she was achieving below average in this subject.

⁴¹ McGee et al (2003).

Dana – *continued*

Dana's English teacher in Year 9 considered she had average ability and although she was not as capable as many of the other students in the class she worked extremely hard and had made some good progress during the year. In his opinion, Dana did not have any learning difficulties in English. However, the highest qualification he felt Dana would achieve would be NCEA Level 2. Our asTTle results show that although Dana was achieving in the middle half of students for writing over the four phases of the study her scores were consistently below the group mean at each phase and her writing achievement only improved slightly from Year 8 to Year 10 (from a score of 498 in Year 8 to a score of 524 in Year 10). In reading, Dana was consistently in the bottom quartile at each phase.

Dana's teachers noted that she always tried her best at school. But they also commented that she was not an easy student to get to know and did not feel they knew her well enough to comment on whether she engaged well in school activities beyond the classroom.

Dana's relationships with family and friends

In her Year 8 interview, Dana indicated that she usually got along with her parents and that she felt they cared about her, understood her and trusted her. But once in Year 9, and as she progressed through her first year at secondary school and into Year 10, she was more likely to feel that her parents did not know when things were upsetting her and she was less likely to tell her parents when she had problems or things were troubling her. Across all four phases of the study there was a sense that she thought her parents did not like some of her friends from school.

Although at each phase Dana said she had 'lots of friends' she did not talk to them outside of school hours and did not do anything with them on the weekends. While she was fairly consistent in her view that she had good friends at school she wavered in her opinion about whether she considered that hanging out with her friends was very important to her or not.

When we asked Dana in Year 8 whether she had received any extra lessons or tutoring to help her with her schoolwork she neglected to mention that she had received assistance from a teacher aide in mathematics and language. It may be that she did not understand the way in which we asked the question and what we were trying to find out or that she simply saw the help she received as part of her normal class work and did not think it was worth mentioning or did not want to admit (to herself or to us) that she did need help. Dana's parents told us that she had received some language assistance during Year 8 but that it had been discontinued because it was considered unnecessary. They felt Dana was very bright, did not have any difficulties with any of her school subjects and was progressing well at school. They based their assessments of Dana's ability on information provided to them by teachers at parent-teacher interviews and school reports, as well as their own knowledge of her.

Dana – continued

What was the transition to secondary schooling like for Dana?

Dana was positive about school and learning, always tried her best, worked hard, was well behaved, got on well with her teachers and did not get into trouble at school. She told us that having friends and people she already knew at the school, as well as having teachers who cared about her, had helped her to settle in at secondary school. She also had an older brother at the school who was able to tell her what it was like there.

On the surface it appeared Dana had made a good transition to secondary school but the underlying issues around her achievement were cause for concern. She was not as capable as many of the other students in her class and while she worked hard, did not cause any problems in class and thought she understood the work required, she was at risk of falling further behind her peers. She needed to have the confidence to ask for help in class and not feel embarrassed to do so, and, even more importantly, perhaps, more understanding of herself to realise when she did need to seek help and that receiving help is OK.

Her teachers in Year 8 and Year 9 identified that mathematics was an area of weakness for Dana but yet her parents seemed unaware that she had learning difficulties in this subject. Information around a student's academic progress can often be disguised by positive feedback on how well behaved they are in class or how 'nice' they are to teach. Research drawn together as part of the Ministry of Education's *Best Evidence Synthesis Iterations* (BES)⁴² also shows that low achieving students, in particular, often focus at school on routines, neatness, presentation, compliance, and social and personal issues, rather than curriculum learning, which seemed to be very much the case for Dana.

While it is important for parents to have high expectations for their children, and equally important for students to feel good about themselves and what they can achieve, it is essential to have realistic expectations and to receive accurate, constructive and timely feedback. Effective feedback, through formative assessment, is found to be one of the strongest positive influences on students' learning.⁴³

Dana's determination to succeed is a credit to her but it will only take her so far. Information gathered from her teachers, as well as from our aTTle assessments, suggested that she would need to make definite improvements in mathematics and English if she was to pass NCEA Level 1 in the following year and be able to achieve higher level qualifications in the future.

⁴² Alton-Lee, A. (2003).

⁴³ Ibid.