

2008 Research Summary

These findings are from the research which includes classroom observations, teacher and target group interviews, teacher reflections, blogs and school websites from 7 classroom teachers; interviews, blogs and reflections from one junior school teacher, 2 teachers who are team leaders and not in a classroom and one secondary teacher working with an English department teacher. There are eleven teachers all together. Also taken into account are notes from professional development meetings and interviews with the project co-ordinator.

The comments made in this summary are only those observed by the researcher or commented on by teachers within the research scope. The achievement data was taken from the 7 classroom teachers' target groups. These students range from Y4 to Year 8.

Literacy

Of the seven classroom teachers one based their intervention on reading, one on oral language and five on writing, although all aspects of literacy were highlighted on the literacy cycles they developed with the project co-ordinator.

- Manaiakalani is a good motivation for writing (7/11). One teacher "remarketed" the literacy programme as e-learning and this really motivated students, especially boys.
- The project provided an authentic audience which "hooked" the students into literacy. (6/11)
- Editing of writing and presentation has improved because of the awareness of an audience and the students' desire to meet the audience needs. (5/11)
- The language used in blogging and making comments on blogs had improved throughout the year. (1/11)
- The Literacy Cycle was the intervention that the Manaiakalani Project was built around. 10/11 teachers have their literacy cycle on the Manaiakalani site. 3/11 have reviewed and refined their cycle during the year. 3/7 cycles were displayed in the classroom and used and reflected on by teacher and students throughout literacy sessions.
- In 10/11 classrooms the writing/reading was the starting point of the intervention and this led to the presentation on the blog.
- Learning intentions and success criteria were discussed and reflected on by 3/7 teachers during literacy sessions.
- Scaffolds, frameworks and exemplars were used effectively by 4/7 teachers.
- Teachers talking about learning during sessions was observed in 3/7 classrooms and the students from these rooms were also able to articulate their learning.
- Most filmed observations showed that there was little formative discussion around learning, most teacher and student talk was about the task.
- 2/7 teachers commented that the Manaiakalani Project dominated the

literacy programme and interfered with progress in some aspects of literacy.

Possible Implications:

- A specific reading, writing or oral language cycle (depending on the intervention) could be linked to the literacy cycle.
- Literacy cycles could be used more in literacy sessions as a guide for teachers and students.
- Formative discussion (learning talk) could be increased to give relevance and meaning to the work being done.
- A balance of all aspects of literacy teaching and learning needs to be found.

ICT

- Blogging was new learning for all teachers in the project.
- A large amount of new ICT learning was done by 6/11 teachers, 2/11 did some new learning and 3/11 only learned about a new piece of software.
- 3/11 teachers had technical issues to deal with throughout the year.
- All teachers, except one had all the resourcing and equipment they needed at all times. Not having equipment based in, or near, their classrooms was an issue for 4/11 teachers.
- All teachers commented that they had to withdraw students out of classrooms to complete tasks (release time was critical).
- 4/7 teachers were observed using interactive whiteboards effectively.
- All teachers found the project time consuming with some teachers working late at night to complete tasks.
- 6/11 teachers worked the intervention with their whole class, with emphasis on the target group.
- In 5/11 classes the students have learned to film and edit movies and they coach other students.
- 3/7 target groups' students talked about the benefits of using and having ICT knowledge. Students don't see using ICT as important – it is just what they do.
- 2/11 teachers commented that students needed new learning with ICTs to remain motivated.
- The teacher and student interviews divulged that teachers did most of the filming and editing in classes of Y1-6 students. Students therefore did not always see the relationship between the literacy and the ICT.
- The Project co-ordinator commented that some teachers were still using 20th Century teaching style to publish their work.

Possible Implications

- Release time is critical for these teachers to continue. This is a consideration when rolling out for all staff in schools. There may need to be discussion around sustainability of the interventions.
- Some interventions may need to be refined to become more practical and effective in the long term.
- As the project rolls out, equipment availability and time factors will be

issues.

- As teachers begin to feel more confident in the integration of ICT into literacy, the student role should increase and the need to discuss the links between literacy and ICT and the learning that occurs will be more necessary.

The Blog

- All teachers now have a class blog and some have posted huge numbers of blogs and others very few. The range is from 304 to 17 with the majority between 30 and 60.
- Posts varied from students reading into a camera, computer illustrated stories with voice overs, photos with voice overs and movies.
- Teachers spent time putting add-ons (Feedjits, digital objects, etc.) on the blog to enhance and monitor the interest.
- To make movies all teachers noted that students needed to be withdrawn from class to achieve this.
- In 8/11 cases teachers edited and uploaded all work to blogs, 3/11 teachers supervised students to do this work.
- Younger students (Yrs 1-4) enjoyed watching themselves and making comments about themselves and their friends. (6/11)
- Older students (Yrs 5-10) were more aware of the wider audience and read and reflected on comments. (5/11)
- 3/11 teachers commented that there was a need for students to understand the concept of blogging and to learn to use it properly. One stated that “Kids don’t realise that stuff stays on (the blog) for so long and what impact it may have on them in the future”.
- For 5/11 teachers the school profile was an important issue when blogging and worked towards quality rather than quantity.
- Commenting on their own and other school’s blogs was taught and was integrated into the literacy programme in 3/11 classes.
- Of the 2/11 classes where students did everything on the blog they had ownership of the blog as it was all their own work.
- Audience appreciation makes the blog relevant and authentic (eg. Authors commenting on book reviews of their books, TV producer contacting teacher to comment on student work)
- In 1/11 classes the blog posts were used as a motivation to write. However, in all other classes, due to the reflection of blog posts and comments made, a feeling of success and achievement motivated students.
- 2/11 teachers used blog work to enter competitions for education film-making and blogging.
- One teacher commented that “To get an audience you have to be blogging, get known in the blogging world and encourage interest by blogging”. The Project co-ordinator commented that the teachers spending time on-line were the ones getting the most comments.
- The Project Co-ordinator saw a change of attitude towards Web2 tools

and how and why they could be used in schools. There was some reluctance at first and now all 11 teachers are using a blogsite.

Possible Implications

- For two-way communication to occur on blogs, students need to be taught how to comment, as an aspect of literacy, and given time during literacy sessions or otherwise to read and comment on-line.
- Reflection and comment on each others' blogs could become part of the literacy programme. There is an opportunity to teach and learn correct use and language of blogging and other Web2 tools.

Achievement Data

There are 55 students across the target groups in 7 schools.

AsTTle Reading

This table shows the progress made in AsTTle Reading in each year group across the 7 schools monitored. It is compared to the national expectation for each year level.

Table 1: AsTTle reading Year 4 to 8 – March 08 to October 08

All year groups except Year 8 made progress over the 8 month period. All year groups except Y5 are achieving at or above the national expectation. The national shift scores are a full year average and the year group shift score is over an 8 month period. The following calculations are based on two-thirds of the national shift score. Y4 made twice the expected shift in 8 months compared to the national score, Y5 made just over half of the expected shift, Y6 made twice the expected shift, Y7 made the expected shift, and Y8 did not make progress. The Y8 cohort was well above the expected mean before the year began and the lack of progress put them at national expectation.

STAR Reading

This table shows the progress in STAR Reading in average stanines made over an 8 month period by each year group across the 7 schools.

Table 2: STAR Reading Comparison of Stanine Scores – March 08 to October 08

These results show that there was little or no progress made in stanines over the 8 month period in the STAR reading test. All Year groups, except Year 8, are achieving at an average expectation for their year level.

AsTTle Writing

This table shows the progress made in AsTTle Writing in each year group across the 7 schools monitored. It is compared to the national expectation for each year level.

Table 3: AsTTle Writing Year 4 to 8 – March 08 to October 08

All year groups made progress over the 8 month period. Years 6 and 7 are achieving above the national expectation. The national shift scores are a full year average and the year group shift score is over an 8 month period. The following calculations are based on two-thirds of the national shift score. Y4 made 4.7 times the expected shift in 8 months compared to the national score, Y5 made the expected shift, Y6 made 4.7 times the expected shift, Y7 made 7.5 times the expected shift, and Y8 made 3.3 times the expected shift.

Effect Size

Table 20: This table shows the effect size that each teacher, teaching Year 4 -8, achieved in reading and writing.

	Reading effect size	Writing effect size
A1	0.9	0.8
A2	1.9	1.0
B1	0.2	1.2
C1	0.2	1.0
D1	0.6	0.5
E1	0.3	-0.3
F1	0.9	0.8

The highest effect size was found in the class where the intervention was not new and the teacher was confident in the work she was doing. Significant effect size was made in three classes in reading and five classes in writing.

Tongan Achievement

There are 12 Tongan students across the target groups in 7 schools.

This table shows the progress Tongan students made in AsTTle Reading in each year group across the 7 schools monitored. It is compared to the national expectation for each year level.

Table 4: AsTTle Reading – Tongan – March 08 to October 08

The Tongan students in Years 4, 5 and 6 made progress over the 8 month period. Y6 Tongan students are achieving above the national expectation. The national shift scores are a full year average and the year group shift score is over an 8 month period. The following calculations are based on two-thirds of the national shift score. Y4 made just over the expected shift in

8 months compared to the national score, Y5 made 0.3 of the expected shift, Y6 made 2.8 times the expected shift, Y7 and Y8 Tongan students made minus gains.

This table shows the progress of Tongan students in STAR Reading Test in average stanines made over an 8 month period by each year group across the 7 schools.

Table 5: STAR Reading – Tongan – March 08 – October 08

These results show that Tongan students in Year 4 and 6 made progress and are achieving above average expectation. Year 5 made a minus gain and are achieving at average expectation, Year 7 made a minus gain and are achieving well below average expectation and Year 8 made no progress and are well below average expectation.

This table shows the progress made in AsTTle Writing for Tongan students across the 7 schools monitored. It is compared to the national expectation for each year level.

Table 6: AsTTle Writing – Tongan – March 08 to October 08

The Tongan students in Years 4, 6 and 8 made progress over the 8 month period. Y7 Tongan students are achieving above the national expectation. The national shift scores are a full year average and the year group shift score is over an 8 month period. The following calculations are based on two-thirds of the national shift score. Y4 made just over the expected shift in 8 months compared to the national score, Y6 made just over the expected shift, Y8 made 5 times the expected shift, Y7 and Y5 Tongan students made minus gains.

Samoan Achievement

There are 12 Samoan students across the target groups in 7 schools. There are no Samoan students in the Y5 target groups.

This table shows the progress Samoan students made in AsTTle Reading in each year group across the 7 schools monitored. It is compared to the national expectation for each year level.

Table 7: AsTTle Reading – Samoan – March 08 to October 08

All Samoan students, except those in Year 8, made progress over the 8 month period. Y4,6 and 7 Samoan students are achieving above the national expectation. The national shift scores are a full year average and the year group shift score is over an 8 month period. The following calculations are based on two-thirds of the national shift score. Y4 made 1.8 times the expected shift in 8 months compared to the national score, Y6 made almost the expected shift, Y7 made just over the expected shift and Y8 Samoan students made a minus gain.

This table shows the progress of Samoan students in the STAR Reading Test in average stanines made over an 8 month period by each year group across the 7 schools.

Table 8: STAR reading – Samoan – March 08 to October 08

These results show that Samoan students in year 6 and 7 made progress and are achieving at average expectation. Year 4 made a minus gain and are achieving at average expectation and Year 8 made no progress and are below average expectation.

This table shows the progress that Samoan students made in AsTTle Writing in each year group across the 7 schools monitored. It is compared to the national expectation for each year level.

Table 9: AsTTle Writing – Samoan – March 08 to October 08

All Samoan students, except those in Year 7, made progress over the 8 month period. Y8 Samoan students are achieving above the national expectation. The national shift scores are a full year average and the year group shift score is over an 8 month period. The following calculations are based on two-thirds of the national shift score. Y4 made 9.2 times the expected shift in 8 months compared to the national score, Y6 made less than half the expected shift, Y8 made 8.5 times the expected shift and Y7 Samoan students made a minus gain. They started the year well above the national expectation and ended the year below the national expectation.

Maori Achievement

There are 17 Maori students across the target groups in 7 schools. There are no Maori students in the Y7 target groups.

This table shows the progress Maori students made in AsTTle Reading in each year group across the 7 schools monitored. It is compared to the national expectation for each year level.

Table 10: AsTTle Reading – Maori – March 08 to October 08

All Maori students, except those in Year 8, made progress over the 8 month period. Y4 and Y6 Maori students are achieving above the national expectation. The national shift scores are a full year average and the year group shift score is over an 8 month period. The following calculations are based on two-thirds of the national shift score. Y4 made 3 times the expected shift in 8 months compared to the national score, Y5 made the expected shift, Y6 made 1.7 times the expected shift and Y8 Maori students made a minus gain. These students were well above national expectation at the start of the year and even though they did not progress they remained above the national expectation at the end of the year.

This table shows the progress of Maori students in the STAR Reading Test in average stanines made over an 8 month period by each year group across the 7 schools.

Table 11: STAR Reading – Maori – March 08 to October 08

These results show that Maori students in year 4 made progress and are achieving above average expectation. Year 5, 6 and 8 made a minus gains and are achieving at or above average expectation.

This table shows the progress that Maori students made in AsTTle Writing in each year group across the 7 schools monitored. It is compared to the national expectation for each year level.

Table 12: AsTTle Writing – Maori – March 08 to October 08

All Maori students made progress over the 8 month period. Y5 and Y8 Maori students are achieving above the national expectation. The national shift scores are a full year average and the year group shift score is over an 8 month period. The following calculations are based on two-thirds of the national shift score. Y4 made 4 times the expected shift in 8 months compared to the national score, Y5 made 5.9 times the expected shift, Y6 made 5.2 times the expected shift and Y8 Maori students made 3.9 times the expected shift.

Achievement based on Gender

This table shows the progress Female students made in AsTTle Reading in each year group across the 7 schools monitored. It is compared to the national expectation for each year level.

Table 13: AsTTle Reading – Girls – March 08 to October 08

All girls, except those in Year 5, made progress over the 8 month period. Y4, 6, 7 and 8 girls are achieving at or above the national expectation. The national shift scores are a full year average and the year group shift score is over an 8 month period. The following calculations are based on two-thirds of the national shift score. Y4 made 1.8 times the expected shift in 8 months compared to the national score, Y6 made twice the expected shift, Y7 made 1.6 times the expected shift and Y8 girls made the expected gain. Y5 girls made a minus gain. These students were well above national expectation at the start of the year and with the minus gain they have fallen below the national expectation.

This table shows the progress Male students made in AsTTle Reading in each year group across the 7 schools monitored. It is compared to the national expectation for each year level.

Table 14: AsTTle Reading – Boys – March 08 to October 08

All boys, except those in Year 8, made progress over the 8 month period. Y7 and Y6 boys are achieving above the national expectation. The national shift scores are a full year average and the year group shift score is over an 8 month period. The following calculations are based on two-thirds of the national shift score. Y4 made 2.6 times the expected shift in 8 months compared to the national score, Y5 made the expected shift, Y6 made 2.2 times the expected shift, Y7 made half the expected shift and Y8 boys

made a minus gain. These students were well above national expectation at the start of the year and even though they did not progress they remained at the national expectation at the end of the year.

This table shows the progress of girls in the STAR Reading Test in average stanines made over an 8 month period by each year group across the 7 schools.

Table 15: STAR Reading – Girls – March 08 to October 08

These results show that the girls in Year 4, 6 and 7 made progress and are achieving above average expectation. Year 5 made a minus gains and are achieving above average expectation. Year 8 girls made no progress.

This table shows the progress of boys in the STAR Reading Test in average stanines made over an 8 month period by each year group across the 7 schools.

Table 16: STAR Reading – Boys – March 08 to October 08

These results show that the boys in Year 4 made progress and are achieving above average expectation. Year 5, 6 and 7 made a minus gains and Y6 boys are achieving above average expectation. Year 8 boys made no progress.

This table shows the progress that girls made in AsTTle Writing in each year group across the 7 schools monitored. It is compared to the national expectation for each year level.

Table 17: AsTTle Writing – Girls – March 08 to October 08

All girls, except Year 7 girls, made progress over the 8 month period. Y5, 6, 7 and Y8 girls are achieving above the national expectation. The national shift scores are a full year average and the year group shift score is over an 8 month period. The following calculations are based on two-thirds of the national shift score. Y4 made 2.8 times the expected shift in 8 months compared to the national score, however they are achieving well below the national expectation. Y5 made 3.4 times the expected shift, Y6 made 4.4 times the expected shift and Y8 girl students made 7 times the expected shift. Y7 girls made a minus gain and completed the year well above the national expectation.

This table shows the progress that boys made in AsTTle Writing in each year group across the 7 schools monitored. It is compared to the national expectation for each year level.

Table 18: AsTTle Writing – Boys – March 08 to October 08

Year 4 and 6 boys made progress over the 8 month period. Y5, 7 and Y8 boys made minus gains. Y7 boys are achieving above the national expectation. The national shift scores are a full year average and the year group shift score is over an 8 month period. The following calculations are based on two-thirds of the national shift score. Y4 made 7.6 times the

expected shift in 8 months compared to the national score, however they are achieving well below the national expectation. Y6 made 3.8 times the expected shift.

Oral Language

This table shows the progress in Oral language sub levels students across the target groups have made from March 08 to October 08.

Table 19: Oral Language Progress Y4-8 March 08 to October 08

All students began the year in Level 1 and no students are achieving at the expected stage for their year level. Progress ranged from an average of 1.2 sub levels to an average of 2.4 sub levels.

Student Engagement (film, interview, blogs, reflections)

- Having work go on the blog is used as an incentive to write for all teachers. The motivation of seeing their work on the blog has made a huge difference to the on-task behaviour and attitude to literacy.
- Students are enthusiastic to write and are beginning to self monitor their work to ensure it is good enough for the blog.

"A lot of reflective talk is happening among peers because they are now more aware of the work being uploaded and hence they are talking about audience that will view the blog and the effectiveness of the work they produce for the audience." (Teacher reflection October 08)

"The enthusiasm for doing more quality work and seeing their work uploaded to our blogspot has made us all enthusiastic." (Teacher reflection August 08)

"Their confidence has increased and they enjoy this time. It is a motivation for them to keep their writing ideas as creative and interesting as possible." (Teacher reflection August 08)

- During observations a set of criteria were used to show the level to which teachers encourage student engagement and a separate set of criteria to show how students engage in the learning. The following tables show the results of one observation lesson taken in November

This table shows the number of points evident from the teacher criteria sheet for student engagement during one lesson observation

Table 21: Teacher Criteria for Student Engagement

Teacher Criteria for Student Engagement			
	Be model, coach, mentor	Provide a learning environment	Provide scaffold for learning
A1	3/3	12/14	7/10
A2	1/3	4/14	3/10
B1	0/3	3/14	2/10
C1	2/3	14/14	7/10
D1	3/3	9/14	7/10
E1	1/3	6/14	3/10
F1	2/3	13/14	8/10

This table shows the number of points evident from the student criteria sheet for student engagement during one lesson observations

Table 22: Student Criteria for Student Engagement

Student Criteria for Student Engagement					
	Demonstrate and interest in learning	Engage in self assessment	Aware of learning and personal goals	Participate in lessons	Accept responsibility for learning
A1	4/7	1/1	0/2	5/5	3/3

A2	2/7	1/2	0/2	3/5	1/3
B1	1/7	0/1	0/2	0/5	0/3
C1	4/7	2/2	2/2	5/5	3/3
D1	4/7	1/2	0/2	5/5	0/3
E1	2/7	2/2	0/2	5/5	0/3
F1	4/7	2/2	0/2	5/5	3/3

- Many students were found working on their blog writing, editing and filming at lunchtimes and before and after school.
- Students were initiating ideas for future work and how to make their blog better.
- The length of time each blog takes to prepare makes a difference to the student engagement over time. The students who had done the same type of project for more than 12 months were not as enthusiastic as those just beginning. Where the blogposts took a lot of time and effort to complete, students lost interest before they were posted.
- Using blogposts to motivate writing only worked when done immediately after the blog was posted.
- Students who reflected on their work and the work of others were able to articulate what they had learned and set their own goals.
- The filmed observation sessions showed the majority of students were engaged in their tasks and remained on task for the whole session.
- Younger students (Y1-4) were more interested in seeing their own blog and watching themselves, they were not interested in other blogs or comments made on their blog.
- Older students (Y5-10) got excited about the outside audience and were very interested in tracking who and how people were commenting on their work.

Possible Implications

- Some teachers may need to refine their projects so the posts take a shorter time to prepare.
- Supervision for before and after school and lunchtime sessions may be necessary as enthusiasm grows throughout schools.
- Student personal goal setting, reflection on learning and taking responsibility for learning was not obvious in most classes and could be a target for the future.

Professional development (interview, PD sessions)

- All teachers commented that the one-to-one sessions with the facilitator were very supportive and personalised their learning. They commented on the fact that the facilitator was always available and was extremely patient with 'slow learners'.
- The facilitator commented that times and dates for one-to-one sessions needed to be less flexible to ensure that teachers are available.
- They all commented that the lead teacher workshops were informative and gave them an opportunity to network and see other

teacher's work, however, those teachers in junior classes and/or not in a teaching position commented that they "needed to adapt ideas to their own setting."

- The release time was very important to all teachers, the need to withdraw students to film and record voice overs and the extra time needed to edit and upload posts were issues for all teachers.
- 6/11 teachers attended the EHSAS Conference in Wellington and commented that it was very helpful in their leadership roles.
- 9/11 teachers attended the U-Learn Conference in Christchurch. Two teachers presented at breakouts.
- The Principal meetings, because of the venue, were purely for housekeeping and sharing information. The Project Co-ordinator suggested these sessions should be more "hands on" to give Principals an opportunity to engage in the projects.
- Resourcing was an issue in some schools. Time and equipment are a crucial part of the success of the project.
- The two Cluster staff meetings were well attended and motivated a great amount of interest in the projects. After the first staff meeting teachers were asking to be part of the project.
- The most learning for teachers, this year, was in the technical aspects of setting up blogspots and websites.

Possible Implications

- As the project rolls out in schools, release time for teachers to work on their blogs, resourcing of time and equipment will become issues.
- The whole Manaiakalani resource was put into a small number of people this year. In future years the professional development may need to look different to encompass more teachers, and may need to be individualised for each school.
- Now that the technical side of the project is working well, more links with literacy could be emphasised in the professional development.

Summary

Research Question 1

How does the Tamaki Schools' EHSAS project (Manaiakalani) impact on the teaching of literacy in the lead teachers' classrooms?

- *In what ways does Manaiakalani impact on teacher knowledge?*
- Blogs established by all schools
- Postings in 2008 range from 17 to 304 per project with the majority between 30 and 60.
- Emphasis on writing for an authentic audience.
- Gives literacy a purpose.

- *In what ways does Manaiakalani impact on teacher confidence?*
- Integration of ICT into literacy
- Use of blogging to enhance literacy programme.
- Learning about new hardware and software is less challenging than before.

- *In what ways does Manaiakalani impact on teacher practice?*
- Strong emphasis on project tended to cause imbalance in literacy programme.
- Some projects were very time consuming and elaborate.
- *What factors (internal and external) impact on teachers' ability to change their practice?*
- Continued support and guidance of facilitator.
- Time to give to the project – much after hours time
- Resourcing of equipment and release time
- The size and shape of each project
- Entering competitions and awards – outside of project scope, gets high profile for teacher and school.
- Has provided a “hook” for teachers – remotivated them
- *To what extent does the professional development impact on teacher beliefs and practice?*
- Provides a forum to discuss and share ideas.
- Provides a forum to reflect on beliefs and practice.

Research Question 2

How does the Tamaki Schools' EHSAS project (Manaiakalani) impact on the students' learning of literacy in the lead teachers' classrooms?

- *In what ways does Manaiakalani impact on student engagement?*
- Has provided a “hook” which has improved motivation and on task behaviour.
- Students beginning to initiate their own learning
- *In what ways does Manaiakalani impact on student achievement in oral language and presentation?*
- Students more confident to speak to camera and to large audiences.
- Becoming aware of the correct way to present to appeal to global audience – beginning to self monitor presentations.
- Oral language achievement results show progress ranging from an average of 1.2 sub levels to an average of 2.4 sub levels.
- All students are achieving well below the expected oral language level for their year group.
- *In what ways does Manaiakalani impact on student achievement in reading and writing?*

AsTTle Reading

- All year groups except Y5 are achieving at or above the national expectation.
- Y4 and 6 made twice the expected shift, Y5, 7 and 8 did not

progress significantly.

STAR Reading

- All Year groups, except Year 8, are achieving at an average expectation for their year level.
- There was no significant shift made by any year group in this test.

AsTTle Writing

- Years 6 and 7 are achieving above the national expectation.
- All year groups progressed the expected national shift. The average shift from Y4 to 8 was 4 times the expected shift.

Ethnic Groups

- No significant difference in ethnic group achievement compared to the whole cohort in AsTTle Reading and STAR Reading.
- In AsTTle Writing the average shifts made by the ethnic groups was significantly different to the whole cohort of 4 times the expected shift:

Tongan - 1.4 times the expected shift

Samoan - 4.5 times the expected shift.

Maori - 5.2 times the expected shift.

Gender Groups

- Girls made slightly more progress in reading.
- In writing, Girls made more progress than boys over all year groups
- Y4 Boys made the most progress in writing and Y8 Girls made significant progress in writing also

Teacher Effect Sizes

- In reading the effect size ranged from 0.3 to 1.9
- In writing the effect size ranged from -0.3 to 1.2