Wānangatia te Putanga Tauira
National Monitoring Study
of Student Achievement

Social Studies
2014 – Overview

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Social Studies 2014

Overview

MINISTRY OF EDUCATION
TE TĀHUHU O TE MĀTAURANGA

UNIVERSITY
of
OTAGO

SAPERE AUDE

Te Whare Wānanga o Otāgo

NEW ZEALAND

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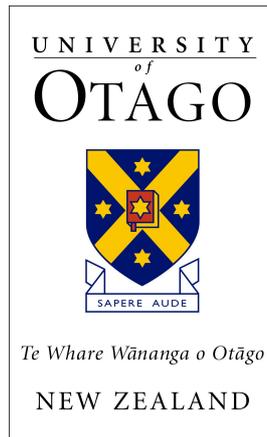
Key reports for Social Studies 2014
(all available online at http://nmssa.otago.ac.nz/reports/index.htm)

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National Monitoring Study
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Executive Summary

Introduction

In 2014, the National Monitoring Study of Student Achievement (NMSSA) assessed student achievement at Year 4 and Year 8 in two areas of the *New Zealand Curriculum* (NZC) – English: reading and social studies. This report is an overview of the results for social studies. It is supported by five additional reports that look at results for priority learner groups, explore contextual data more deeply and provide technical information related to different components of the study.

Study features

In 2014, NMSSA assessed achievement in social studies using a series of performance and interview tasks administered individually by teacher assessors to approximately 800 students at Year 4 and Year 8. Item response theory was used to create a measure of achievement in social studies called the Nature of Social Studies (NSS).

The NSS construct focused on students' achievement on three aspects: conceptual understanding; active participation in society; and values and perspectives. The aspects covered the four conceptual strands of the social sciences learning area in the NZC (i.e., identity, culture and organisation; place and environment; continuity and change; and the economic world). The NSS aimed to give researchers a method of measuring students' progress in an incremental way as the social sciences learning area in the NZC does not have a hierarchical structure of incremental steps that students must pass through. The NSS scale was aligned to the levels of the NZC through a curriculum alignment process that defined minimum scale scores (cut-scores) associated with achieving, on balance, the objectives outlined at curriculum levels 2, 3 and 4.

Other data were collected through questionnaires from students, teachers and principals. For this report, we draw on evidence from the NSS measure and two sections of the student questionnaire: attitudes to social studies; and opportunities to learn in social studies. The questionnaires were answered by approximately 2,200 students at each year level. Information from the student, teacher and principal questionnaires is investigated in a separate report (*Social Studies 2014 – Contextual Report*).

Key findings

Overall achievement

Sixty-three percent of Year 4 students achieved above the minimum score on the NSS scale associated with achieving curriculum level 2 objectives. Thirty-eight percent of Year 8 students achieved above the minimum score on the NSS scale associated with achieving curriculum level 4 objectives.

The curriculum expectation at Year 4 is that students will have, on balance, achieved level 2 objectives by the end of the year. In Year 8, they will have, on balance, achieved level 4 objectives by the end of the school year. The NMSSA assessment was carried out in Term 3. Therefore, we could expect a greater proportion of students at each year level to have met or exceeded the minimum score on NSS for the appropriate curriculum level by the end of the year.

Variation in achievement by student-level and school-level variables

Year 8 students scored, on average, 33 scale score units higher than Year 4 students. This difference indicates that New Zealand students make, on average, about 8 scale score units of 'progress' per year between Year 4 and Year 8. The difference is equivalent to an effect size of 0.41. The difference in the average scores for Year 4 and Year 8 students represents a similar effect size to that recorded in several other NMSSA studies (e.g., science, English: writing, mathematics and statistics, and health and physical education).

School decile[1] and student ethnicity were strongly associated with achievement in social studies at Year 4 and Year 8. Students from low decile schools scored lower, on average, than those who attended high decile schools. The differences were approximately equivalent to the average 'progress' over about 2 years of schooling.

Māori, Pasifika and non-NZ European students scored lower, on average, than non-Māori, non-Pasifika and NZ European students, respectively. The differences were approximately equivalent to the average 'progress' over 1 to 2 years of schooling. The differences at Year 8 were smaller and more consistent across the groups.

Māori and Pasifika students were more likely than other students to attend mid and low decile schools. A regression analysis indicated that score differences related to ethnicity could be detected after decile was taken into account.

There were no differences in achievement on the NSS scale between average scores for boys and girls, or between school types.

When scale score differences between Year 4 and Year 8 are taken as a proxy for 'progress', there is relative consistency in Year 4 to Year 8 'progress' across gender, ethnicity and school decile groupings. There is some indication that Pasifika students have made more 'progress' on average between Year 4 and Year 8 than non-Pasifika students.

The NMSSA includes students with special education needs in the assessment programme. Participating schools identified students' special education needs using three categories: High Special Education Needs; Moderate Special Education Needs; and On Referral. At Year 4 and Year 8, the average score for the combined group of students with special education needs was lower than students with no special education needs. The progress between Year 4 and Year 8 for students identified with special education needs was slightly lower than those with no special education needs.

Attitudes and opportunities to learn

Generally, Year 4 students had more positive attitudes to social studies than Year 8 students. This pattern is consistent with findings in other learning areas reported by NMSSA (English: writing, science, mathematics and statistics) and the National Education Monitoring Project (NEMP)[2].

At Year 8, there was a detectable association between achievement and attitudes to social studies. Students who were more positive about social studies scored higher, on average, than those students who were more negative about social studies. However, at Year 4, there was no discernible relationship.

The majority of students, including students with special education needs, reported frequently experiencing a range of experiences and opportunities related to learning in social studies at school.

There was a detectable association between achievement and opportunities to learn in social studies when students talked about and discussed their ideas with other people in social studies; felt good about giving their opinion and ideas in social studies; and (for Year 8 students) were able to think about and discuss what they have done in their social studies topics.

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[1] School decile is reported in terms of low, mid and high bands. The *low* band comprised students in decile 1–3 schools, the *mid* band comprised students in decile 4–7 schools and the *high* band comprised students in decile 8–10 schools.

[2] http://nemp.otago.ac.nz/

1 Introduction to the National Monitoring Study of Student Achievement

This chapter provides a broad overview of the purpose and features of NMSSA and introduces the focus of the study for 2014.

1. Purpose of national monitoring

NMSSA is designed to assess student achievement at Year 4 and Year 8 in New Zealand English-medium state schools. The main purposes are to:

- provide a snapshot of student achievement against the NZC
- identify factors that are associated with achievement
- assess strengths and weaknesses across the curriculum
- measure change in student achievement over time
- provide high-quality, robust information for policy makers, curriculum planners and educators.

National monitoring has a particular focus on Māori students, Pasifika students and students with special education needs.

NMSSA began in 2012 and is carried out over a 5-year cycle. During the first cycle, we are setting the baseline for measuring change in student achievement over time in subsequent cycles.

The study continues the monitoring undertaken by the NEMP between 1995 and 2010. It also complements information generated by international evaluation studies, such as the Trends in International Mathematics and Science Study (TIMSS), the Progress in International Reading Literacy Study (PIRLS) and the Programme for International Student Assessment (PISA).

In addition to designing and carrying out an assessment programme, NMSSA collects contextual information from students, teachers and principals to help understand the factors associated with students' achievement. This includes: students' attitudes to, and their opportunities to learn in, the specific learning area being investigated; teachers' confidence in teaching the specific learning area and their views on the learning opportunities provided to students in classroom programmes; teachers' and principals' views of the professional and curriculum support provided by the school; and the provision in the school for the learning area.

The project is supported by advisory panels of curriculum experts, reference groups for the priority learner groups (Māori, Pasifika and special education needs), and a technical reference group.

2. 2014 study

In 2014, the dual focus for the NMSSA study was English: reading[3] and social studies. In social studies, nationally representative samples of about 800 students at each of Year 4 and Year 8 took part in a series of individual performance and one-to-one assessment tasks. These students also responded to a range of questionnaire statements regarding social studies as part of a larger sample of about 2,200 students[4] at each year level.

Experienced, specially trained classroom teachers conducted the assessments during Term 3 2014 (July to September).

3. Structure of the social studies overview

This report provides an overview of findings from the 2014 NMSSA social studies programme with a focus on achievement in social studies, and students' attitudes towards and opportunities to learn in social studies. Additional reports provide more detailed reporting on learning contexts (including the views of teachers and principals), as well as the results for priority learner groups.

The report is set out in four chapters.

Chapter 1 provides a broad overview of the NMSSA programme.

Chapter 2 describes the development of the social studies data collection instruments and achievement scale. It also sets out the analytical and reporting approaches that were used to present the findings.

Chapter 3 presents the findings for Year 4 and Year 8 student achievement in social studies and reports these against the curriculum levels of the social sciences learning area. It also compares achievement between Year 4 and Year 8 students, and differences between subgroups of gender, ethnicity, school decile and school type. The achievement of students with special education needs is also discussed.

Chapter 4 examines contextual factors that may be associated with student achievement in social studies and draws on the NSS achievement data and information collected from students about their attitudes to social studies and their learning experiences in social studies at school.

The report also contains an appendix providing detailed tables of results. Other background and technical information is contained in the report *Technical Information 2014 – Social Studies, English: Reading*[5].

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[3] The overview of the findings for English: reading can be found in the Educational Assessment Research Unit and New Zealand Council for Educational Research. (2015). *NMSSA Report 5.1 English Reading 2014 – Overview.*

[4] Information about the sampling process and the achieved samples can be found in Appendix 1 of *NMSSA Report 7 Technical Information 2014 – Social Studies, English Reading.*

[5] Educational Assessment Research Unit and New Zealand Council for Educational Research. (2015). *NMSSA Report 7 Technical Information 2014 – Social Studies, English Reading.*

2 The NMSSA Social Studies Assessment Programme

This chapter provides an overview of the NMSSA assessment programme for social studies. It includes four parts.

- Part 1 discusses the social sciences learning area of the NZC and the assessment of social studies in the New Zealand context.
- Part 2 describes how New Zealand students have achieved in the previous national monitoring study of social studies.
- Part 3 describes the components of the NMSSA assessment programme.
- Part 4 provides information about how the findings are presented.

1. Assessing social studies achievement in New Zealand

The aim of the 2014 NMSSA social studies programme was to assess and understand the achievement and progress of Year 4 and Year 8 students in social studies as it is described in the social sciences learning area of the NZC[6].

The NZC describes social sciences as being "about how societies work and how people can participate as critical, active, informed, and responsible citizens"[7]. The learning area of social sciences is based on conceptual understandings. These are the big ideas that students develop about social science concepts, such as customs, change, continuity and choices. The concepts, in turn, relate to four conceptual strands of social sciences in the NZC: identity, culture and organisation; place and environment; continuity and change; and the economic world.

Students' understandings of the conceptual strands are developed through a range of approaches[8]. Two approaches include: (i) considering ways in which people make decisions and participate in social action; and (ii) exploring and analysing people's values and perspectives.

The NZC provides a framework rather than a detailed plan for teaching and learning. Schools determine the contextual detail of their own school-based curriculum, while staying clearly aligned with the intent of the NZC document. Thus, each teacher is able to use contexts appropriate to their particular students.

2. New Zealand students' social studies achievement in other monitoring studies

The previous national monitoring project – the National Education Monitoring Project (NEMP) – monitored achievement in social studies at 4-yearly intervals commencing in 1997. The final NEMP report on social studies[9] presented data collected in the 2009 school year. Overall, there was a very small gain in the performance of Year 4 students in the 12 years between 1997 and 2009, and no change for Year 8 students over the same 12-year period.

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[6] Ministry of Education. (2007). *The New Zealand Curriculum.* Wellington: Learning Media.

[7] New Zealand Curriculum, page 30.

[8] Social inquiry is another process for exploring and interacting with each of the conceptual strands. However, social inquiry is iterative, needs-driven and happens in the authentic context of a classroom inquiry. While it is possible to identify discrete skills that are associated with the social inquiry approach, such as forming questions, making generalisations, this process was considered less appropriate for assessment in the NMSSA context.

[9] Smith, J., Crooks, T., Gilmore, A., & White, J. (2009). *NEMP Report 40 Social Studies Results 2009.* Dunedin: University of Otago, Educational Assessment Research Unit.

NEMP reported differences between key population subgroups by averaging effect size differences across all tasks used to assess social studies achievement in the study.

The variables that were most strongly associated with achievement were ethnicity (NZ European students on average scored higher than Māori and Pasifika students); school decile (students from high decile schools scored higher, on average, than students from mid decile schools who in turn scored higher, on average, than students from low decile schools); and at Year 8, the amount of English spoken at home.

3. NMSSA social studies assessment programme

An advisory panel of social studies experts met with the NMSSA team in 2013 to consider the social sciences learning area of the NZC. The experts identified key research questions to guide the programme, including contextual questions to better understand students' achievement in social studies. The research questions were used to guide the development of the NMSSA social studies assessment programme.

There were three key research questions.

1. How well have Year 4 and Year 8 students developed the aspects of the Nature of Social Studies: conceptual understandings, active participation in society and values and perspectives?
2. What are the contextual factors (attitudinal and learning experiences in social studies) that influence achievement in social studies?
3. How do Year 4 and Year 8 students differ in social studies achievement, attitudes to social studies and opportunities to learn in social studies?

Components of the social studies assessment programme

Three components were developed to assess and understand student achievement in social studies (see Table 2.1). One component was focused directly on assessing student achievement using an individual assessment approach. The two remaining components were focused on collecting contextual and attitudinal information from students, teachers and principals.

Table 2.1   The components of the 2014 NMSSA social studies assessment programme

Component	Focus	Assessment approach
Nature of Social Studies (NSS)	*Conceptual understandings* of big ideas that students develop about social studies concepts (e.g., customs, change, continuity, choice). The concepts relate to the four conceptual strands of: • Identity, culture and organisation • Place and environment • Continuity and change • The economic world *Active participation in society* (i.e., being constructively involved in participating in, or observing, critically informed actions in relation to local or global issues). *Values and perspectives* (i.e., deeply held beliefs about what is important and desirable). They are expressed through the ways in which people think and act.	Individual assessment: one-to-one interviews and performance activities
Student attitudes and learning experiences in social studies	Student attitude towards, and engagement with, social studies. Student views of opportunities and experiences for learning in social studies at school.	Student questionnaire: group-administered paper-and-pencil
Teacher and principal perspectives on the teaching and learning of social studies in the school	Teacher and principal views of social studies learning in their school. Teacher confidence as social studies educators. Professional support and learning related to teaching social studies.	Teacher and principal questionnaires

Component 1: The Nature of Social Studies (NSS) assessment

The construct 'Nature of Social Studies' is made up of three inter-related aspects of social studies: conceptual understanding; active participation in society; and values and perspectives. The NMMSA assessment of social studies comprised a wide range of contexts that had the best potential of being familiar to most students.

The NSS assessment focused on the extent to which students had developed, over a wide range of contexts, conceptual understandings, active participation in society and values and perspectives in social studies.

The NSS assessment framework

The NSS assessment included 11 tasks that assessed the three aspects described above. Each task included a set of items that were presented together around one theme or idea. Items were associated with one or more aspects. The final set of items that contributed to the NSS scale was marked against criteria on a scale of 0, 1 or 2. Table 2.2 shows the relative emphases of the aspects in the NSS construct.

Table 2.2   Number of items per aspect in the Nature of Social Studies measure by year level

Aspect of the NSS construct	Year 4		Year 8	
	Items *N = 40*	Score points *N = 80*	Items *N = 42*	Score points *N = 84*
Conceptual understanding	23	46	25	50
Active participation in society	9	18	9	18
Values and perspectives	8	16	8	16

A framework describing social studies and a curriculum coverage map were written to guide task development. As part of the development process, a template was used for each task to record task characteristics, such as the conceptual strand, focus, aspect/s of the construct being assessed, the context (theme or idea) of the task, the assessment approach and the difficulty level. For further details, see Appendix 4 of the report, *Technical Information 2014 – Social Studies, English: Reading*.

An example of a NSS assessment task

For example, one NSS assessment task, called *Graffiti*, was given to students at Year 4 and Year 8. *Graffiti* was a complex task that assessed all three aspects of NSS. The conceptual strands of identity, culture and organisation, and place and environment were presented to students in the context of graffiti in public places. At the start of the task, students were told by the teacher assessors that the title of the activity was *Graffiti* and they were going to be thinking about how people use and see places differently as shown in Figure 2.1.

The *Graffiti* task contained four items. Each item is shown separately in Figures 2.2 to 2.5 along with their respective questions, aspect or aspects, focus, scoring guide and examples of student responses. Items 1 and 2 are related to the four pictures shown in Figure 2.1, whereas items 3 and 4 are related to the photo shown in Figure 2.4. Also note that items 3 and 4 had more than one aspect and focus, but they were assessed using a single scoring guide.

Each item in the *Graffiti* task required students to express their own value position and provide justification for it, recognise diverse values and perspectives, recognise how people view and use places differently and understand processes for making decisions. To obtain a full score, students were required to demonstrate an understanding of abstract concepts at a complex/deeper level.

Overall, students engaged with the task and appeared to enjoy it. This was possibly due to students' familiarity with the content and the brevity of the questions.

Here are some photos showing graffiti. Graffiti is when people draw or write on a wall or other surface in public places sometimes without permission.

Photograph courtesy of Otago Daily Times

Curriculum Strands:	Identity, culture and organisation
	Place and environment
Key Concepts:	How people view and use places differently
	How formal and informal groups make decisions

Figure 2.1   Nature of Social Studies assessment task *Graffiti*

ITEM 1:   *Is it okay to graffiti? Why do you say that?*

Aspect: Values and perspectives
Focus: Express their own values positions and provide justification

Scoring guide	Student responses
0: Unable to identify their own values positions	"No. I'm not sure."
1: Provides a basic/surface level justification for their position	"No, because people might not like it."
2: Provides a more complex/deeper-level justification for their position	"It depends if they have permission or not. Sometimes the council might have asked to have graffiti on this one wall because it is really boring but if the person does it without permission it's vandalism and ruining what's there."

Figure 2.2   Item 1 of the Nature of Social Studies assessment task *Graffiti*

ITEM 2:   *Why might people graffiti? Try to think of 3 reasons*.

Aspect: Values and perspectives
Focus: Recognise diverse values and perspectives

Scoring guide	Student response
0: Unable to explain others' values positions	"Because they like drawing."
1: Explains others' values on a simple/surface level	"They might do it because they think it's cool or they think it's fun to do or it might be for a joke."
2: Explains others' values on a more complex/deeper level	"To express what they think, to express their feelings. And to get a point across to people."

Figure 2.3   Item 2 of the Nature of Social Studies assessment task *Graffiti*

Here is picture of some graffiti found on a school.
The person who did this graffiti didn't have permission to do it. Some people who belong to the school community like the graffiti, other people want it gone.
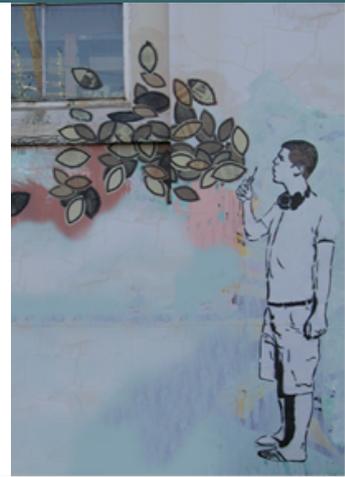
ITEM 3: *Why might people want this graffiti to stay on the school?*
Why might people want to get rid of this graffiti?

Aspects: Conceptual understanding
Values and perspectives
Foci: How people view and use places differently
Recognise diverse values and perspectives

Scoring guide	Student response
0: Demonstrates no understanding of the concepts. Unable to explain others' values positions	"I don't know."
1: Demonstrates understanding of concrete concepts/ at a surface level Explains others' values on a simple/surface level	"They might want it to stay because it looks cool and gives the school some colour. But it might not be what the teachers wanted and it mucks up their wall."
2: Demonstrates understanding of abstract concepts at a deeper level Explains others' values on a more complex/deeper level	"Because it's not like writing or a bad picture. Young kids could look at it and think it was really cool. But because it is a school the adults might say that they don't want this on the school because they don't want people to think it's ok to put graffiti on a school."

Figure 2.4   Item 3 of the Nature of Social Studies assessment task *Graffiti*

Item 4:	*How could the school community decide whether to keep the graffiti or remove it? Try to think of two different ways they could decide. Why are these ways good ways to decide?*

Aspects: Conceptual understanding
Active participation in society
Foci: How formal and informal groups make decisions
Identify how themselves and others can take action or make decisions based on knowledge and understanding

Scoring guide	Student response
0: Demonstrates no understanding of the concepts Unable to describe a social decision-making process to solve an issue or problem	"They can paint over it."
1: Demonstrates understanding of concrete/surface-level concepts Describes a simple social decision-making process	"Maybe a vote because it makes it more fair or see if the principal wants it because he's kind of in charge of the school."
2: Demonstrates understanding of abstract/deeper-level concepts Describes a more complex social decision-making process	"Maybe try and find the person and tell him that he has to ask permission and if he says yes they can keep the painting up and if he says no they can take the painting down. They could just do a survey and take the parents' consideration and take the students' consideration and the principal's." *Survey* "Because it gives everyone a chance to vote and it's a good way to show how much they like the design at the school. And it gives everyone a choice to decide what they would rather do." *Talking to person* Because if they find this person they could just tell them to stop, or tell him to ask permission next time if you want to graffiti on their wall and it's important that he knows not to do it again without permission."

Figure 2.5   Item 4 of the Nature of Social Studies assessment task *Graffiti*

Development of the NSS assessment

The NSS tasks were developed by assessment development staff within the NMSSA project team and a seconded social studies curriculum expert. All tasks were carefully reviewed, including a cultural review, to make sure the tasks were appropriate for a diverse audience. The NSS tasks were piloted in Dunedin schools before being used in a larger trial involving several schools in Otago, Hamilton and Auckland. The student responses from the pilots and trial were used to refine the tasks and support the development of the marking rubrics for the main study.

Administering the assessment

Teacher assessors were trained how to administer the NSS tasks during a 5-day training session prior to the main study. During the study, the tasks were administered to eight students in each school. Teacher assessors were carefully monitored and received feedback to ensure consistency and accuracy of administration. Student responses were captured on video and stored electronically for marking. In total, approximately 800 Year 4 and 800 Year 8 students responded to these tasks.

Marking

Teacher markers, many of whom had been teacher assessors, were employed to mark the tasks along with final-year University of Otago College of Education students. All markers were trained, and quality assurance procedures were used to ensure consistency of marking. The marking rubrics were refined as necessary at the beginning of marking to ensure they reflected the range of responses found in the main study.

Constructing the NSS scale

An Item Response Theory (IRT) approach (specifically the Rasch model)[10] was used to construct a measurement scale for the NSS assessment. This included analysing items for any bias with respect to year level, gender and ethnicity. The techniques used to do the scaling were similar to those used in studies such as PISA and TIMSS. Some advantages of applying the Rasch model are:

- both relative question difficulty and student achievement can be located on the constructed scale
- the measurement scale units represent the same amount of change in achievement across the whole scale
- achievement for students in different year levels can be located on the same measurement scale
- the scale can be described to show what students typically understand and are able to do at different levels of achievement (e.g., the scale description found later in this chapter).

Standardising the scale

For ease of understanding, all NMSSA scales, including the NSS scale, were standardised so that:

- the average of all students (Year 4 and Year 8 combined) was equal to 100 scale score units
- the average standard deviation for the two year levels was equal to 20 scale score units.

Achievement on the NSS scale ranged from about 50 to 180 scale score units.

Reliability of the NSS scale scores

The WINSTEPS software provided reliability indices for achievement scores and item locations. These were 0.90 and 0.99 respectively, indicating that both student achievement and relative question difficulty have been located on the scale with a satisfactory level of precision.

The NSS scale description

Figure 2.6 provides a description of the NSS scale. The description incorporates the three aspects of the construct assessed by NSS: conceptual understanding; active participation in society; and values and perspectives. It also provides examples of the range of conceptual strands and contexts used in the NSS assessment. The description was developed from the data collected using the NSS assessment in the NMSSA social studies programme conducted in Term 3, 2014.

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[10] IRT is an approach to constructing and scoring assessments and surveys that measure mental competencies and attitudes. IRT seeks to establish a mathematical model to describe the relationship between people (in terms of their levels of ability or the strengths of their attitude) and the probability of observing a correct answer or a particular level of response to individual questions. IRT approaches provide flexible techniques for linking assessments made up of different questions to a common reporting scale. The common scale allows the performance of students to be compared regardless of which form of the assessment they were administered.

Scale : Nature of Social Studies

180 —
170 —
160 —
150 —
140 —
130 —
120 —
110 —
100 —
90 —
80 —
70 —
60 —
50 —

Students in this part of the scale are typically able to:
- Demonstrate wider, more in-depth interpretations and understandings of a variety of concepts from a range of contexts
- Transfer to an increasing extent, concepts from a range of contexts to a different context
- Connect concepts to an increasing extent, and explore multiple concepts
- Describe complex decision making processes to solve issues or problems
- Identify issues or problems of social significance in a given context
- Identify, with increasing breadth and depth, how the actions of themselves and others contribute to society
- Provide a complex justification for their own values position
- Begin to give complex reasons for other people's actions based on their values

Students in this part of the scale are typically able to:
- Demonstrate a concrete understanding of concepts from a range of contexts
- Begin to transfer concepts from familiar contexts to different contexts
- Make straightforward connections between two concepts
- Describe a simple decision making process to solve an issue or problem
- Identify issues or problems of personal significance in a given context
- Identify how the actions of themselves and others contribute to society
- Provide a simple justification for their own values position
- Give simple reasons for people's actions based on their values

Students in this part of the scale are typically beginning to:
- Demonstrate an understanding of concepts from a range of contexts
- Identify issues or problems of personal significance in a given context
- Provide a simple justification for their own values position
- Give simple reasons for people's actions based on their values

Concepts
- Innovation creates opportunity and challenge
- How formal and informal groups make decisions
- Roles and responsibilities
- Common good
- Use of resources/sustainability
- Status of Māori as Tangata Whenua
- Cultural diversity and interaction
- Effect of people on the environment
- How people see and use places differently
- Factors affecting pricing
- Profit
- Influences on people's purchasing decisions
- Identifying what constitutes culture
- How symbols communicate identity
- Social responsibility

Contexts
- Shopping
- A school garden
- Volunteering
- Gathering kai moana
- Immigration
- Graffiti
- A school fair
- Cultural symbols
- A natural disaster

Figure 2.6   The scale description for the Nature of Social Studies assessment

To create the description, the scoring categories for each item (0, 1 or 2) in the NSS assessment were aligned with the scale. This meant identifying where the students who scored in each category were most likely to have achieved overall on the scale. For example, the scoring category '1' for item 1 (shown in Figure 2.6) was located at the part of the scale where students who scored a '1' on that item were most likely to have achieved overall. Once this had been done for all items, the descriptors that defined each scoring category were examined. The NMSSA team identified the competencies expected as the scale locations associated with the different scoring categories increased, and students' responses became more sophisticated. The result was a three-part description that provided a broad indication of what students typically know and can do in social studies when achieving at different places on the scale.

The description is provided to give readers a strong sense of how social studies was assessed through the NSS assessment and how social studies competence increases with rising achievement. Readers are encouraged to refer back to the description when considering the meaning of the NSS scale scores provided throughout the report. The scale descriptors have not been written to necessarily 'line up' with curriculum levels or achievement objectives. They are a direct reflection of what was assessed and how hard or easy students found the content of the assessment.

Reporting achievement against curriculum levels

An alignment exercise was undertaken to link performance ranges on the NSS scale to the levels of the curriculum. An invited panel of teachers, academics and professional learning facilitators was guided by psychometric staff from the NMSSA team to achieve this. Creating this link allowed scale scores on the NSS assessment to be reported in terms of curriculum levels.

In the NZC, each of the first four curriculum levels was designed to represent about 2 years of learning at school. In general, the expectations are that students in Year 4 will, on balance, achieve level 2 objectives by the end of the year, and that students in Year 8 will, on balance, achieve level 4 objectives by the end of the year.

The alignment exercise focused on defining the minimum score on the NSS scale associated with achieving curriculum level 2 objectives and level 4 objectives.

More information about the curriculum alignment procedure is provided in Appendix 5 of *Technical Information 2014 – Social Studies, English: Reading*.

Component 2: Students' attitudes and learning experiences in social studies

The second component of the NMSSA social studies programme related to students' attitudes, and their learning experiences in social studies. Data were collected via a student questionnaire, which was the same for Year 4 and Year 8 and was administered to all students in the 2014 NMSSA study (approximately 2,200 at each year level).

Attitude to social studies

One section of the student questionnaire asked students to show how much they agreed with a number of statements related to their general attitude to social studies. The term 'social studies' was explained to students as being "…when we learn about ourselves in New Zealand and other places in the world, and how people live there; about the work people do and how they make a living; about why people have different ideas; and about your ideas and how you can do things in your community". The section on attitudes included statements related to students' self-efficacy in social studies and their level of engagement and interest in learning social studies. Students responded on a 4-point agreement scale to each statement: 'do not agree at all', 'agree a little', 'agree quite a lot' and 'totally agree'.

A draft version of the Attitude to Social Studies section was piloted with small groups of students before being used in a developmental trial with several hundred students at Year 4 and Year 8 in a range of schools. Responses from the trial were analysed using the Rasch model, and the results were used to inform the selection of the final set of statements for the main study.

The Rasch model was applied to data from the main study to construct a reporting scale for the Attitude to Social Studies section of the questionnaire. The scale allowed each student's response to the attitude statements to be summarised as a score on a scale. Higher scale scores were associated with strong agreement to the statements indicating a more positive attitude. Lower scale scores were related to low levels of agreement indicating a less positive attitude.

As with other NMSSA scales, the scale was set to have an average of 100 scale score units and a standard deviation of 20 scale score units for a year level.

Attitude to Social Studies scale reliability
The WINSTEPS software provided reliability indices for attitude scores and item locations. These were 0.82 and 1.00, respectively, indicating that both student attitude score and attitude statement have been located on the scale with a satisfactory level of precision.

Opportunities to learn in social studies
Another section of the student questionnaire asked how often a range of activities happened in social studies at school. Students responded using a 4-point scale of 'never', 'sometimes', 'often' and 'very often'.

A draft list of learning opportunities was piloted and trialled, and a final list was selected for use in the main study.

Component 3: Teacher and principal perspectives on social studies

Questionnaires were developed to ask teachers and principals about their perspectives on the learning and teaching of social studies.

Up to three teachers from each school were asked to fill in a teacher questionnaire. The teachers chosen were those who had the most students participating in the NMSSA assessment. The questionnaire included sections asking teachers about their preparedness to teach social studies, students' opportunities to learn and their own opportunities to undertake professional learning.

The principals' questionnaire asked principals about the school-wide programme in social studies.

Other reports focus more deeply on results for priority learner groups[11] and contextual data[12], including data collected from teachers and principals.

4.   Presentation of the findings

In this section, we provide some background and rationale for the graphs and statistics chosen for reporting.

Box plots

Box and whisker plots (box plots) are used extensively throughout this report to summarise score distributions.

To construct a box plot, scores are ordered from low to high and then divided into four equally sized groups, called quartile groups. These are displayed as shown in Figure 2.7.

The box is used to show the middle 50 percent of the scores and the whiskers show the top and bottom 25 percent of scores. In this report, the whiskers of the box plot do not include outliers (scores considered to be rare and unusual) and have a maximum length of 1.5 multiplied by the inter-quartile range (the middle 50 percent).

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[11]   Educational Assessment Research Unit and New Zealand Council for Educational Research. (2015). *NMSSA Report 6.2 Māori Student Achievement in Social Studies – Key findings*.
    Educational Assessment Research Unit and New Zealand Council for Educational Research. (2015). *NMSSA Report 6.3 Pasifika Student Achievement in Social Studies – Key findings*.
    Educational Assessment Research Unit and New Zealand Council for Educational Research. (2015). *NMSSA Report 6.4 Achievement of Students with Special Education Needs in Social Studies – Key findings*.
[12]   Educational Assessment Research Unit and New Zealand Council for Educational Research. (2015). *NMSSA Report 6.5 Social Studies 2014 – Contextual Report*.

When box plots for two or more groups are presented as part of the same graphic, the widths of the boxes are used to represent the relative sizes of the groups. For instance, a narrow box indicates that the group size is smaller than a wider box for a group presented in the same plot.

The colours for the box plots have been chosen to assist with readability. Different hues have been selected to represent each of the reporting groups (for instance, gender) and two different shades of each hue chosen to represent the group at each year level (a lighter shade for Year 4 and a darker shade for Year 8). The intention behind the use of shades was to show the relationships between the year levels and the different reporting group types at the same time.

The upper, or fourth quartile is represented by the top 'whisker' and shows the range of the highest 25 percent of scores.

The box represents the two middle quartiles and shows the range of the middle 50 percent of scores.

The line across the middle of the box represents the median. Fifty percent of scores lie on or above the median and 50 percent lie below.

The lower, or first quartile is represented by the bottom 'whisker' and shows the range of the lowest 25 percent of scores.

Figure 2.7   Understanding box plots

For plots involving the NSS assessment, the curriculum levels that correspond to scale score cut-offs are noted on the right of the graph. The scale scores between curriculum levels are indicated by the grey horizontal dotted lines across the graph as shown in Figure 2.8.
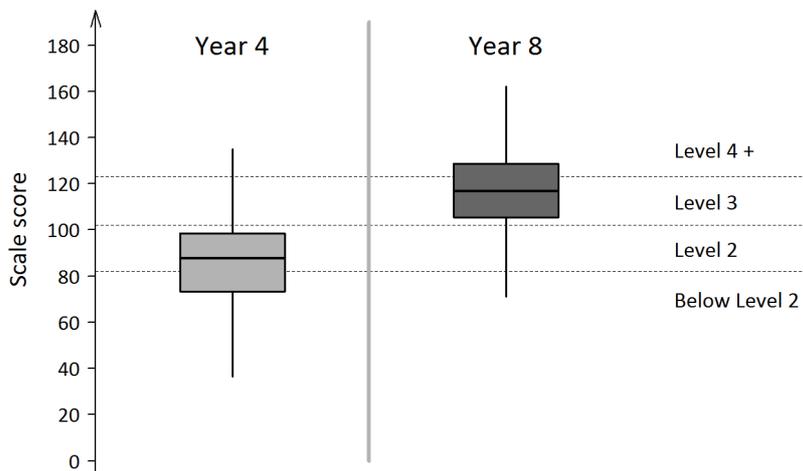

Figure 2.8   Interpreting box plots and NZC level bands

Line graphs of score distributions

Another type of graph used to display data in this report is the line graph, shown in Figure 2.9. Line graphs are used to show how the distributions of scores for various groups compare with curriculum expectations. A detailed exercise was undertaken to establish the locations on the scales where one curriculum level merged into the next. Full details of this can be found in Appendix 4 of *Technical Information 2014 – Social Studies, English: Reading*[13].


Horizontal shaded bars are placed on the line graphs to show how the scale aligns to the curriculum levels of the social sciences learning area. The width of these bars reflect the fact that the curriculum levels themselves and the alignment exercise cannot provide precise cut-off points, therefore, their use as an approximate guide is more appropriate.
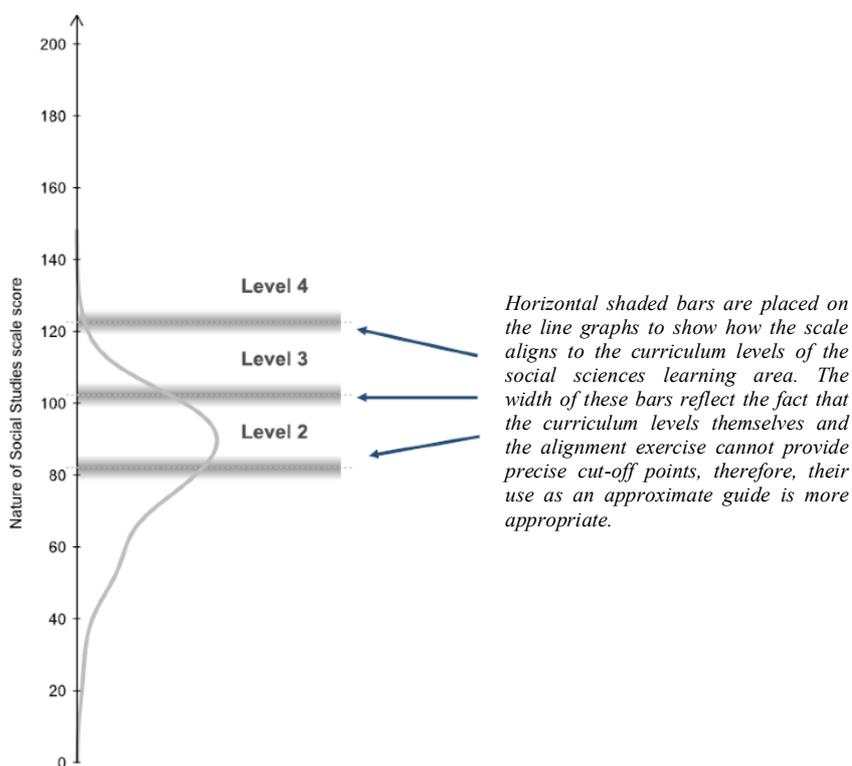
Figure 2.9   Interpreting score distributions and NZC level bands

Tables of numerical results

The NSS measure quantifies achievement differences in terms of scale score units. Because the same scale has been used at both Year 4 and Year 8, it is possible to estimate how much change, on average, occurs on an annual basis. Table 2.3 shows the differences in average scores on the NSS scale between Year 4 and Year 8, and how this relates to an annual change. As can be seen, students' scores changed, on average, by about 8 NSS scale score units per year. This figure is useful to keep in mind when interpreting score differences throughout the report.

Table 2.3   Difference in average scale scores on the Nature of Social Studies measure between Year 4 and Year 8

	Nature of Social Studies
Difference in average scale scores (Year 8–Year 4)	**33**
Confidence interval	(30.5, 35.5)
Average annual change	8.3
Average annual effect size	0.41

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13 Educational Assessment Research Unit and New Zealand Council for Educational Research. (2015). *NMSSA Report 7: Technical Information 2014 – Social Studies, English: Reading.*

Table 2.3 also shows the 95 percent confidence interval associated with the difference in average scores at Year 4 and Year 8. Confidence intervals provide a range within which we can be fairly sure the population value for the reported statistic lies. The confidence intervals have been adjusted to account for any design effect created through the sampling procedure (i.e., sampling schools and then sampling students). As a general rule of thumb, when the confidence intervals for two groups overlap, any difference between the groups may reasonably be explained by the kind of random variation that occurs in sampling studies and the difference between the groups is **not** considered to be statistically significant. The significance level was set at 0.05 for all of the statistical tests discussed in this report.

In this report, any score differences between groups shown in tables are in bold when their associated confidence intervals do not include zero. For instance, in Table 2.3 the Year 8–Year 4 difference of 33 score points is in bold, therefore the difference is considered to be statistically significant.

Effect sizes have been used to help interpret differences between groups. An effect size quantifies the difference between the average scores for two groups in terms of standard deviation units. The calculation of effect size in this report weights the standard deviation for each group by its sample size[14]. Because the standard deviations for groups are often different, this can mean that the same difference in scale scores results in slightly different effect sizes for different pairs of groups. When comparing two effect sizes it is very important to refer back to the scale score differences to make sure of a valid interpretation.

The use of rounding

In the tables and text presented in this report, the average scores for each group and subgroup have been rounded to whole numbers. Some tables of findings report the difference between average scale scores for two groups or subgroups. These differences have been calculated using the non-rounded averages and are numerically correct. In some cases, the difference reported may not be the same as the simple difference between the pair of rounded averages shown in the table.

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[14] The formula for the effect size calculation is: $\dfrac{M_1 - M_2}{\sqrt{\dfrac{(n_1-1)s_1^2 + (n_2-1)s_2^2}{n_1 + n_2 - 2}}}$, where M_1 and M_2 represent the average scores for group 1 and group 2,

s_1 and s_2 their standard deviations and n_1 and n_2 the number in each group.

3 Student Achievement in Social Studies

This chapter describes Year 4 and Year 8 student achievement in social studies based on the measure developed for the NMSSA study: Nature of Social Studies (NSS). It examines what students know and can do within and between year levels, including variation by gender, ethnicity, school decile and school type. Achievement is also reported against the levels of the NZC. The final section examines achievement for students with special education needs.

Detailed tables of means, standard deviations, sample sizes, 95 percent confidence intervals and effect sizes can be found in Appendix 1: Summary Statistics.

1. Achievement in social studies

Figure 3.1 uses box plots to show the distributions of student achievement on the NSS assessment for Year 4 and Year 8 students, and Table 3.1 presents the summary statistics for each year level.

Figure 3.1 shows that there was a wide range of achievement on the NSS measure at both year levels and some overlap in the distributions of achievement across the year levels. This means that, at Year 4 and Year 8, student achievement on the NSS ranged from below curriculum level 2 to curriculum level 4 and above. Some Year 4 students are achieving at a similar level as some Year 8 students and vice versa.
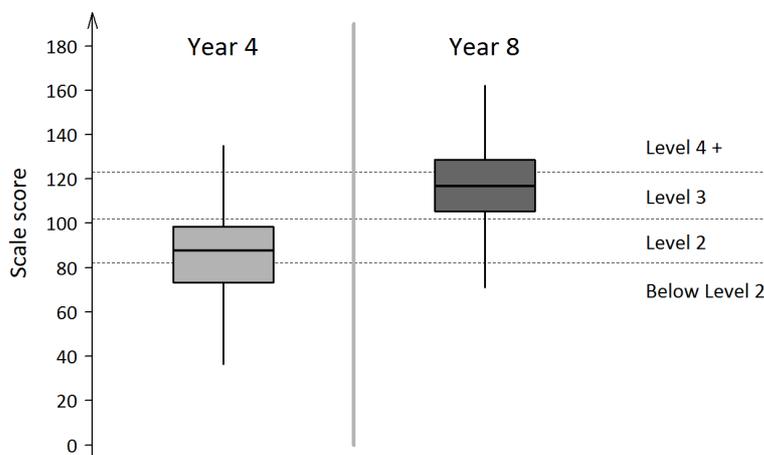

Figure 3.1   Distribution of Year 4 and Year 8 student's scores on the Nature of Social Studies scale

Table 3.1   Summary statistics for Year 4 and Year 8 achievement on the Nature of Social Studies scale

	Year 4	Year 8	Difference between Year 8 and Year 4
	N = 791	*N* = 793	
Average scale score	83	116	**33**
Confidence interval for the average	(81.5, 85.0)	(114.5, 118.0)	(30.5, 35.5)
Standard deviation	21	19	

Year 8 students scored higher, on average, than Year 4 students by 33 scale score units. This is equivalent to an average annual change of about 8 scale score units.

2. Achievement against the curriculum

Table 3.2 shows the performance of Year 4 and Year 8 students in terms of achievement against curriculum levels. For more detail about performance by gender, ethnicity, decile band, school type and special education needs, see Appendix 1, Table A1.6 Social Sciences Curriculum Levels: Year 4 students and Table A1.7 Social Sciences Curriculum Levels: Year 8 students.

Table 3.2   Percentage of Year 4 and Year 8 students achieving across curriculum levels on the Nature of Social Studies scale

Curriculum level	Year 4		Year 8	
	%	Confidence interval %	%	Confidence interval %
Level 4 and above	1	(0.0, 2.0)	38	(34.0, 42.5)
Level 3	15	(12.0, 18.0)	43	(39.0, 47.0)
Level 2	47	(42.5, 51.0)	14	(11.0, 16.5)
Below Level 2	37	(33.0, 44.5)	5	(3.0, 7.0)

Figures 3.2 and 3.3 show a more generalised view, where the whole distribution of achievement for students in Year 4 and Year 8, respectively, can be seen against the agreed alignment of curriculum levels 2, 3 and 4 with the NSS scale.
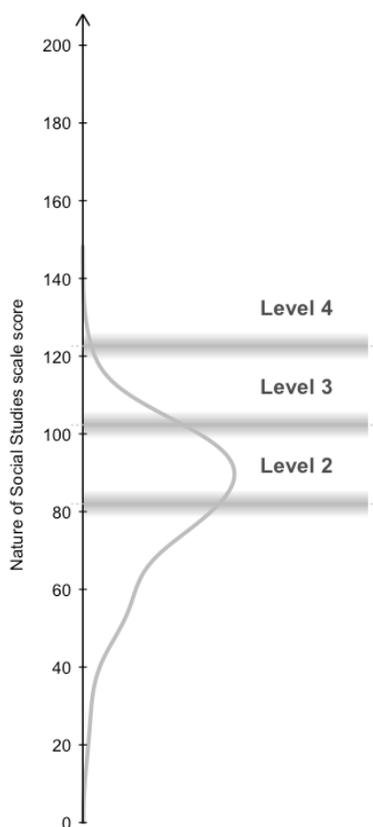

Figure 3.2   Distribution of Year 4 students' achievement on the Nature of Social Studies against the NZC levels for social sciences
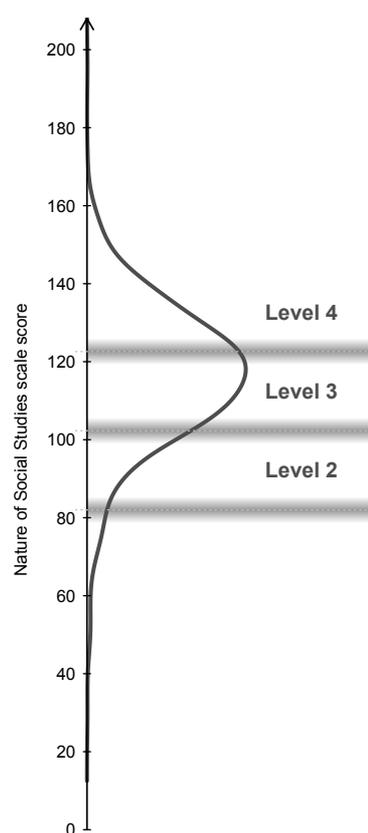
Figure 3.3   Distribution of Year 8 students' achievement on the Nature of Social Studies against the NZC levels for social sciences

Sixty-three percent of Year 4 students achieved above the minimum score on the NSS scale associated with achieving curriculum level 2 objectives. The curriculum expectation at Year 4 is that students will have, on balance, achieved level 2 objectives by the end of the year.

Thirty-eight percent of Year 8 students achieved above the minimum score on the NSS scale associated with achieving curriculum level 4 objectives. The curriculum expectation at Year 8 is that students will have, on balance, achieved level 4 objectives by the end of the year.

The NMSSA assessment was carried out in Term 3. Therefore, we could expect a greater proportion of students at each year level to have met or exceeded the minimum score on NSS for the appropriate curriculum level by the end of the year.

3. Achievement by student-level variables

Figure 3.4 and 3.5 display the score distribution on the NSS assessment at Year 4 and Year 8 by gender and ethnicity[15].
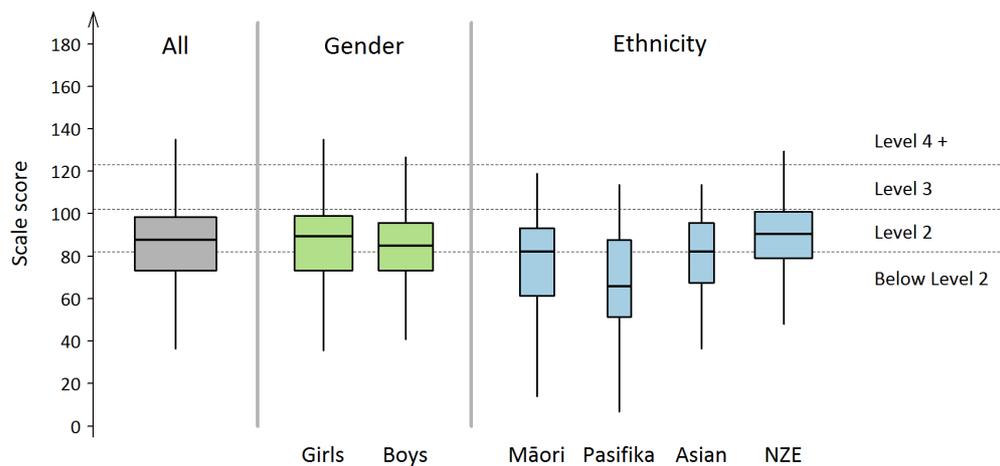

Figure 3.4   Distribution of Year 4 students' scores on the Nature of Social Studies scale, by gender and ethnicity (NZE = NZ European)
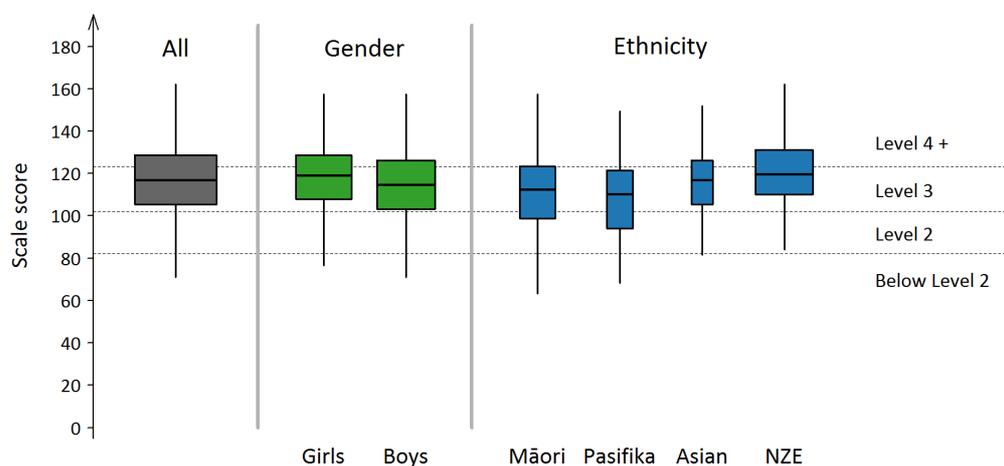

Figure 3.5   Distribution of Year 8 students' scores on the Nature of Social Studies scale, by gender and ethnicity (NZE = NZ European)

There was very little difference in the average achievement between boys and girls at either Year 4 or Year 8.

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[15] Non-prioritised ethnicity was used where students could identify with up to three ethnicities. This meant they could be present in multiple ethnic groups. Student ethnicity data were obtained from National Student Number information held on the Ministry of Education ENROL database. The 'NZ European' category included NZ Pākehā only. The 'Pasifika' category included Tokelauan, Fijian, Niuean, Tongan, Cook Islands Māori, Samoan and other Pacific peoples. The 'Asian' category included Filipino, Cambodian, Vietnamese, Other Southeast Asian, Indian, Chinese, Sri Lankan, Japanese, Korean and other Asians. The 'Other' category included Australians, British/Irish, German, Dutch, Greek, Polish, South Slav, Italian and other Europeans, Middle Eastern, Latin American, African and Not Stated. The 'Other' category included about 2 percent of students. About 7 percent of students at Year 4 and about 6 percent at Year 8 indicated they belonged to ethnic groups categorised as 'Other'.

At Year 4, NZ European students scored higher than non-NZ European students by an average of 16 scale score units, which is roughly equivalent to 2 years of schooling. Non-Māori students scored higher than Māori students by an average of 10 scale score units, and non-Pasifika students scored higher than Pasifika students by an average of 19 scale score units. Ethnic group differences at Year 8 followed a similar pattern to Year 4, except the difference for each comparison was 10 scale score units. These differences were all statistically significant. See Appendix 1, Tables A1.3 and A1.4 for more details.

The average score differences between ethnic groups reflect those reported by NEMP in 1997, 2001, 2005 and 2009.

4. Achievement by school-level variables

Figure 3.6 and 3.7 display the level and spread of scores by school decile band and school type[16] on the NSS measure in Year 4 and Year 8.
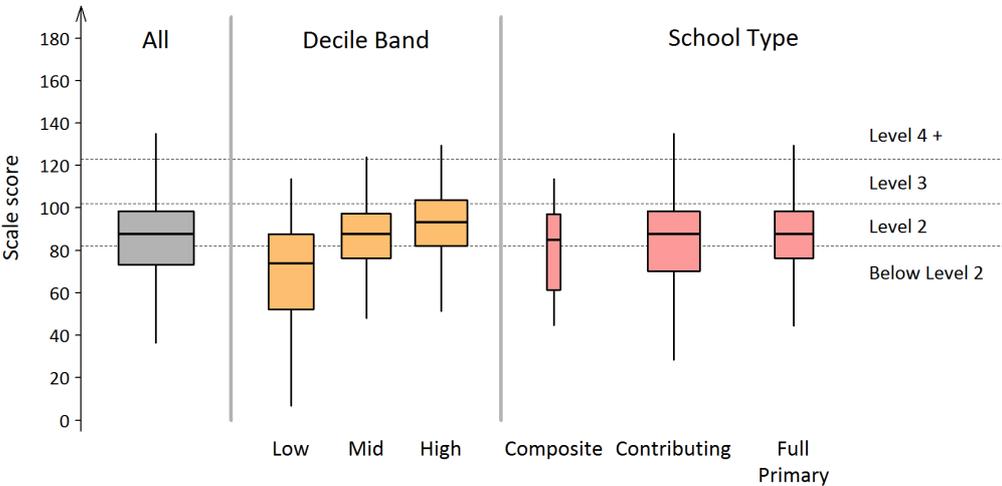
Figure 3.6   Distribution of Year 4 students' scores on the Nature of Social Studies scale, by decile band and school type
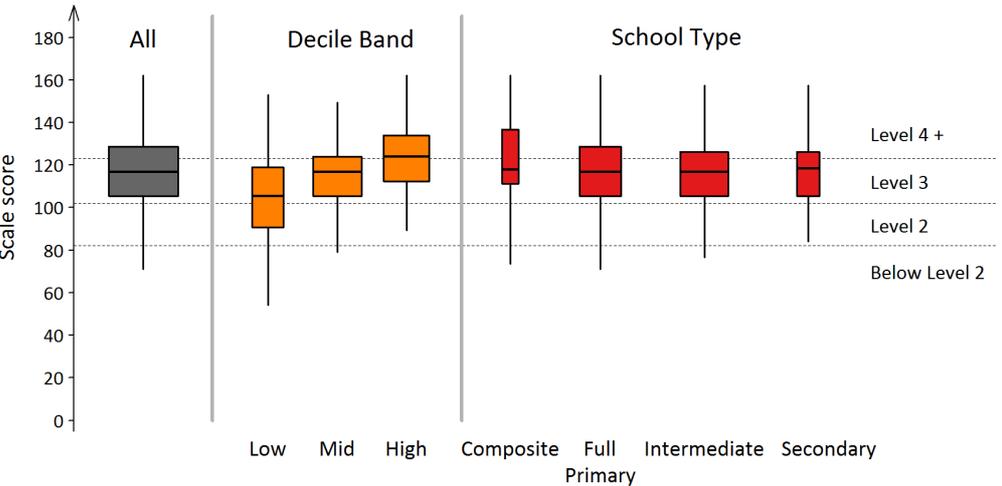
Figure 3.7   Distribution of Year 8 students' scores on the Nature of Social Studies scale, by decile band and school type

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[16] A *composite* school combines students from different year levels that are typically found in separate primary or secondary schools. A *contributing* school caters for Years 1 to 6 of schooling. A *full primary* school caters for Years 1 to 8 of schooling. A *secondary* school caters for Year 9 onwards of schooling. An *intermediate* school caters for Years 7 and 8 of schooling.

At both year levels, students from low decile schools scored lower than students from mid and high decile schools by an average of 15 and 21 scale score units respectively at Year 4, and by an average of 11 and 20 scale score units respectively at Year 8. A difference of 8 scale score units is equivalent to the progress made in about 1 year of schooling. The differences at each year level were statistically significant. These differences reflect those reported by NEMP in 1997, 2001, 2005 and 2009.

Students from different school types performed, on average, at similar points on the NSS scale. This was true for both year levels.

Interactions between school-level variables

Differences in average scores between ethnic groups may be confounded with school decile band differences. A regression analysis indicated that separate effects related to decile band and to ethnicity could be identified. This means that, when we account for differences in achievement between decile bands, there are still differences in average NSS scores between students from different ethnic groups. At Year 4, the difference in achievement between NZ European and Māori students was smaller in the higher decile band. More information about the interactions between variables is provided in Appendix 6 of *Information 2014 – Social Studies, English: Reading.*

5. Difference in achievement between Year 4 and Year 8

Table 3.3 shows the average difference in achievement on the NSS assessment between Year 4 and Year 8 for all students and for a range of subgroups within each year level.

Table 3.3   Difference in average scores between Year 4 and Year 8 on the Nature of Social Studies scale, by subgroup

Nature of Social Studies					
	Year 4 average scale score	Year 8 average scale score	Year 8–Year 4 difference in average scale scores	Confidence interval for the difference	Annualised difference in average scale scores
Year					
All	83	116	**33**	(30.5, 35.5)	8
Gender					
Girls	83	115	**33**	(30.0, 37.0)	8
Boys	84	118	**33**	(29.0, 36.0)	9
Ethnicity					
Māori	76	109	**33**	(27.0, 38.5)	8
Pasifika	67	108	**41**	(33.5, 49.0)	10
NZ European	89	121	**31**	(28.5, 34.0)	8
School decile					
Low	70	104	**34**	(28.0, 39.5)	8
Mid	85	115	**30**	(26.5, 33.0)	8
High	91	124	**32**	(29.0, 35.5)	8

In general, the differences in average scale scores between Year 8 and Year 4 across all the subgroups were fairly similar to the difference between 'all' Year 4 and Year 8, except for the Pasifika subgroup which had a larger difference. The difference between the average scale scores of students in Year 4 and Year 8 was equivalent to an annual effect size of 0.41 and was 8 scale score units per year. The annual average difference for Pasifika students was 10 scale units. The average score at Year 4 for Pasifika students was lower than that for Māori students. At Year 8, Māori and Pasifika students' averages were similar. While Pasifika appear to have accelerated their progress, the findings generally suggest that differences in achievement already exist at Year 4 and they continue to exist at Year 8.

Statistically significant differences in average achievement related to ethnicity and decile band have been identified in earlier NMSSA studies (i.e., writing, science, mathematics and statistics, and health and physical education) and in the previous NEMP reports.

6. Achievement of students with special education needs

The NMSSA includes students with special education needs in the assessment programme. Participating schools identified students' special education needs[17] using the following categories.

- High special education needs: for example, Ongoing Resourcing Scheme (ORS) funded, severe behaviour or communication assistance from Special Education.
- Moderate special education needs: for example, provided with a teacher aide from school funds, on the case load for Resource Teachers: Learning and Behaviour (RTLB) or Child, Youth and Family Services (CYFS).
- On referral: for example, referred to Special Education or CYFS with action pending.

Students who were not identified as having special education needs using the criteria above were assigned to the 'no special education needs' group.

Schools were able to withdraw any students for whom they believed participating in NMSSA would be inappropriate. Parents were also able to withdraw students from participating in the study. Reasons for withdrawing students were not always related to students having special education needs, but could also include, for example, students who had less than 2 years' experience with English, or whose parents did not wish their child to be out of the classroom. Table 3.4 indicates the number of students with special education needs by category withdrawn from the study by principals and parents prior to the assessment programme.

Table 3.4   Number of Year 4 and Year 8 students with special education needs
             withdrawn by principals or parents

Special education needs category	Year 4	Year 8
	N = 45	*N* = 55
High special education needs	10	14
Moderate special education needs	26	25
On referral	5	6
Parents (SEN category not specified)	4	10

Table 3.5 shows a breakdown of numbers according to the special education needs categories. The on referral and high needs groups were very small at each year level and cannot be considered nationally representative. Overall, about 10 percent of students at Year 4 and 7 percent of students in Year 8 were included in either the high, moderate or on-referral categories in the national samples.

Table 3.5   Number of students with special education needs in the Year 4 and
             Year 8 samples

Special education needs category	Year 4	Year 8
	N = 791	*N* = 793
High special education needs	4	3
Moderate special education needs	76	49
On referral	4	3
No special education needs	707	738

Students with special education needs were encouraged to participate in the study using the level of assistance normally provided to them in school. The NMSSA project team also prepared accommodations such as larger print booklets when these were requested. Students could choose whether or not to read the larger print booklets. None of the three students identified as having visual impairment chose to use the larger print booklets.

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[17] The categories of special education needs were those common in schools and therefore easy for schools to respond to. Schools were asked to describe the funding supports in place for children with special education needs to access the curriculum, through ORS, RTLB, Ministry of Education specialist staff and school funds. To capture any unmet needs, they were also asked to note students who were on referral to Ministry of Education specialist staff, RTLB, etc. These categories were discussed and endorsed by the NMSSA special education needs reference group.

The findings are reported for the combined group of students with special education needs at each year level. There were 84 students in the combined group at Year 4 and 55 at Year 8. Figure 3.8 shows the distribution of achievement across combined special education needs categories.
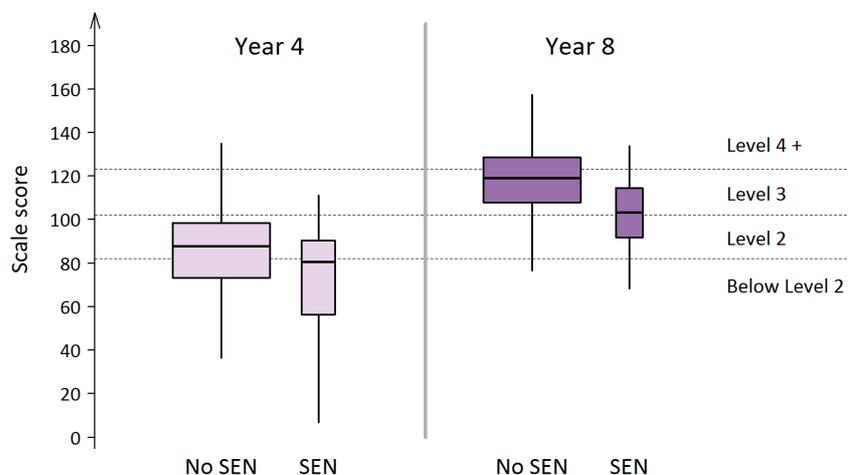

Figure 3.8   Distribution of scores on the Nature of Social Studies scale for students with special education needs at Year 4 and Year 8 (SEN = special education needs)

Overall, students with special education needs achieved lower on the NSS scale than students with no special education needs at both year levels. The average score for students with special education needs was 13 scale score units lower than students with no special education needs at Year 4. This score difference is equivalent to just over 1 year of schooling. At Year 8, the difference was 18 scale score units.

The difference between the average scores for Year 4 and Year 8 for students with special education needs was 28 scale score units compared with 33 scale score units for those with no special education needs. This difference is equivalent to an annual difference of 7 scale score units. This difference is very similar to the average of 8 scale score units for the whole sample.

7.   Summary

Sixty-three percent of Year 4 students scored above the minimum score on the NSS scale associated with achieving curriculum level 2 objectives. Thirty-eight percent of Year 8 students scored above the minimum score on the NSS scale associated with achieving curriculum level 4 objectives.

There was a wide range of achievement amongst the students at Year 4 and at Year 8 that spanned from below curriculum level 2 to curriculum level 4 and above. However, Year 8 students scored, on average, 33 scale score units higher than Year 4 students. This difference indicates that, on average, New Zealand students made about 8 scale score units of 'progress' per year between Year 4 and Year 8 (an effect size of 0.41).

School decile and student ethnicity were strongly associated with achievement in social studies at both Year 4 and Year 8. There were no statistically significant differences between average scores for boys and girls, or between different school types.

There was relatively consistent 'progress' from Year 4 to Year 8 across gender, ethnicity and school decile groupings, although Pasifika students made slightly more 'progress', on average, than non-Pasifika students.

At Year 4 and Year 8, the average score for students with special education needs was lower than students with no special education needs. The 'progress' between Year 4 and Year 8 for students with special education needs was slightly lower than those with no special education needs.

4 Students' Attitudes to Social Studies and their Opportunities to Learn

As described in Chapter 2, the NMSSA social studies assessment programme used a student questionnaire to gather data on a number of contextual factors. The questionnaire included sections related to students' attitudes to social studies and their opportunities and experiences to learn in social studies at school. This chapter describes how students responded to these sections and compares the pattern of responses to achievement.

1. Attitudes to social studies

Students were asked to respond to a series of statements about their attitudes to social studies. The term 'social studies' was explained to students as being: "…when we learn about ourselves in New Zealand and other places in the world, and how people live there; about the work people do and how they make a living; about why people have different ideas; and about your ideas and how you can do things in your community". The students showed their level of agreement with each statement using a 4-point scale: 'do not agree at all', 'agree a little', 'agree quite a lot' and 'totally agree'. Figures 4.1 and 4.2 show how students responded at Year 4 and Year 8, respectively.

In general, Year 4 and Year 8 students were positive in their attitudes to social studies. The vast majority of students either 'agreed a little', 'agreed quite a lot' or 'totally agreed', with most of the statements. Year 4 students tended to use stronger agreement categories than Year 8 students.

Responses to two attitude statements stood out as being more negative than responses to the other statements. Most notable was that 22 percent of Year 4 and 47 percent of Year 8 students 'did not agree at all' with the statement 'Social studies is my favourite subject at school'.

The pattern of responses was similar for boys and girls.
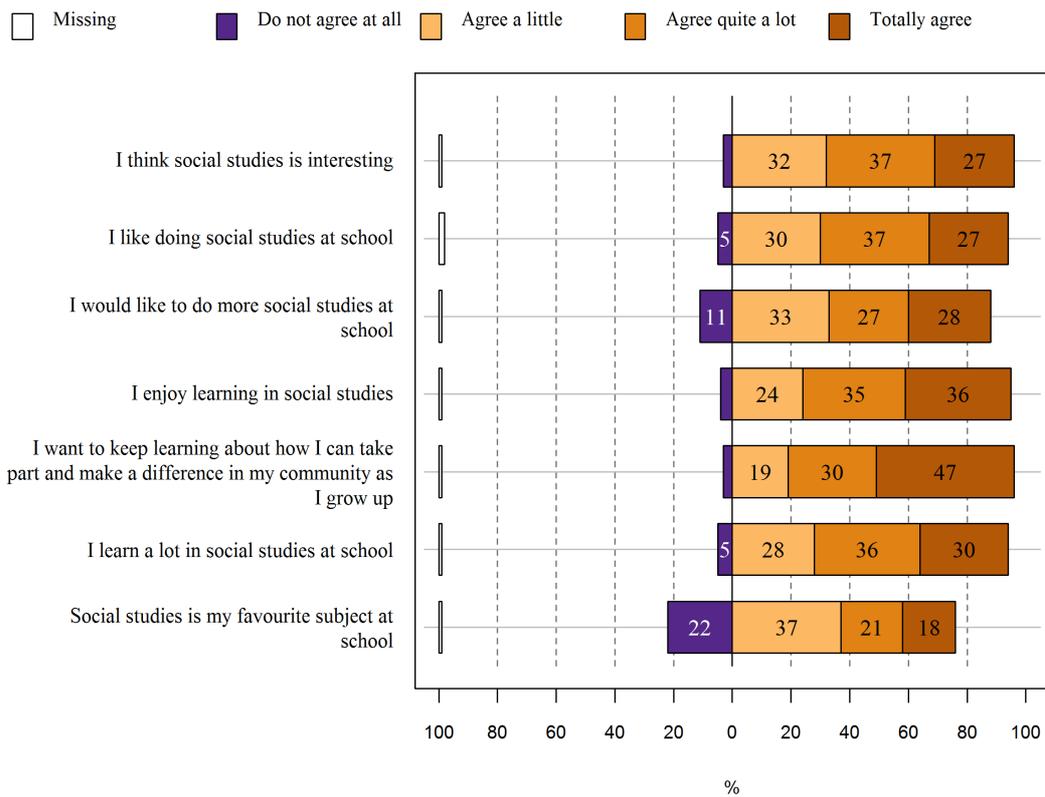
Figure 4.1   Percentage frequency of Year 4 student responses to individual attitude statements about social studies
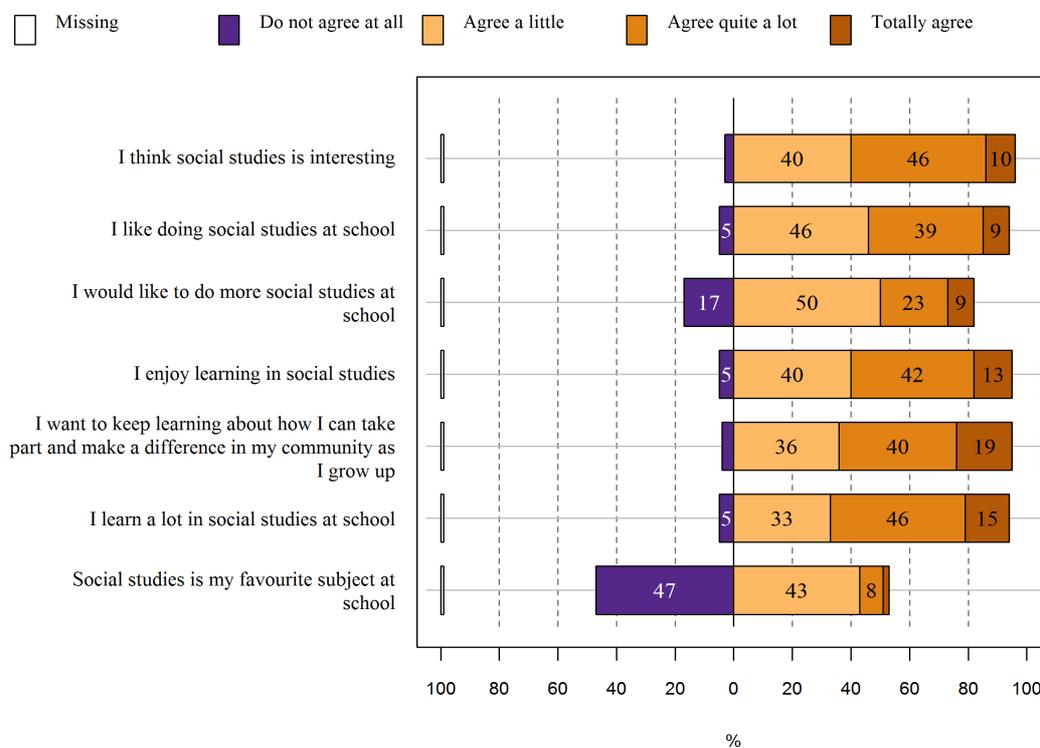

Figure 4.2   Percentage frequency of Year 8 student responses to individual attitude statements about social studies

Attitude to Social Studies scale

The combined responses to the attitude statements were used to construct an Attitude to Social Studies scale. Figure 4.3 shows the distribution of Attitude to Social Studies scale scores in Year 4 and Year 8. The scale has been divided into regions associated with different response levels to the attitude statements. That is, students whose overall attitude scores were located at this part of the scale were most likely to have selected 'totally agree' rather than any of the other response categories when responding to the statements. On the other hand, the 'negative' region indicates the part of the scale where 'do not agree at all' responses were most probable.
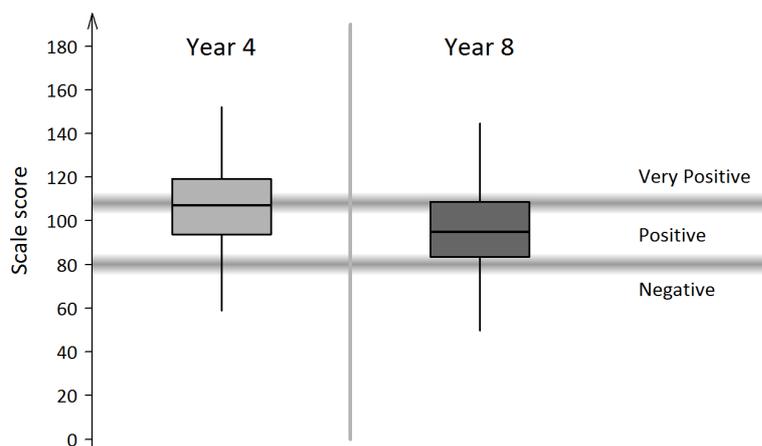

Figure 4.3   Distribution of Year 4 and Year 8 students' scores on the Attitude to Social Studies scale

As indicated by the response patterns to the individual attitude statements shown above, on average, Year 4 students were located higher on the Attitude to Social Studies scale than Year 8 students. Most Year 8 students, however, were still categorised as 'positive' or 'very positive'.

The difference between the averages on the Attitude to Social Studies scale was statistically significant (10 scale score units). Very few students had 'negative' attitudes to social studies at either year level.

Figures 4.4 and 4.5 show the Attitude to Social Studies scale scores by gender and ethnicity for Year 4 and Year 8, respectively.

On average, boys were less positive than girls by 4 and 3 scale score units at Year 4 and Year 8, respectively. Māori students at Year 8 were less positive, on average, than non-Māori by 6 scale score units. However, Pasifika students were more positive, on average, than non-Pasifika students at Year 4 and Year 8 by 7 and 5 scale score units, respectively. At Year 4, non-NZ European students were more positive on average than NZ European students by 3 scale score units.

The pattern in Attitudes to Social Studies from Year 4 to Year 8 is consistent with findings regarding attitudes in other learning areas reported in other NMSSA studies (i.e., English: writing and science, mathematics and statistics, and health) and NEMP findings from 1997, 2001, 2005 and 2009.
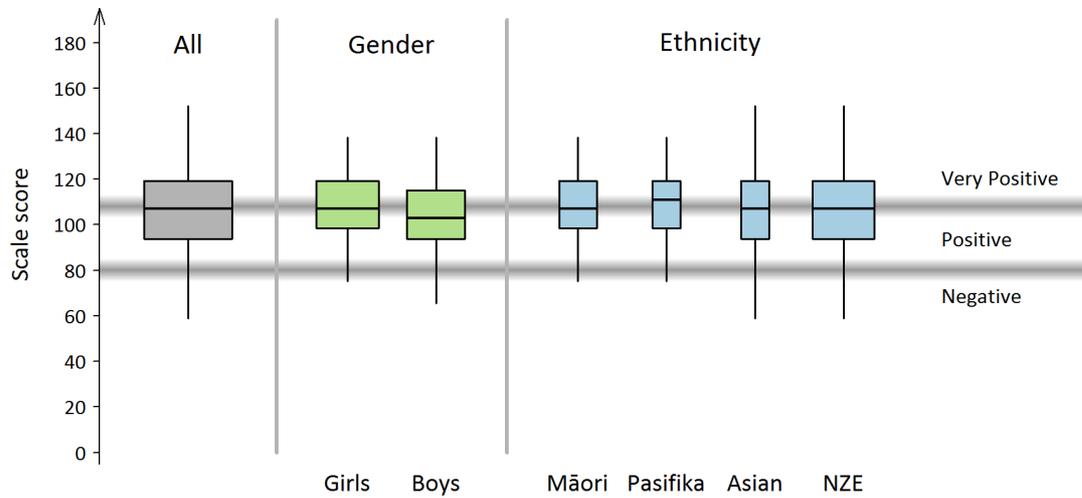
Figure 4.4   Distribution of Year 4 students' scores on the Attitude to Social Studies scale, by gender and ethnicity (NZE = NZ European)
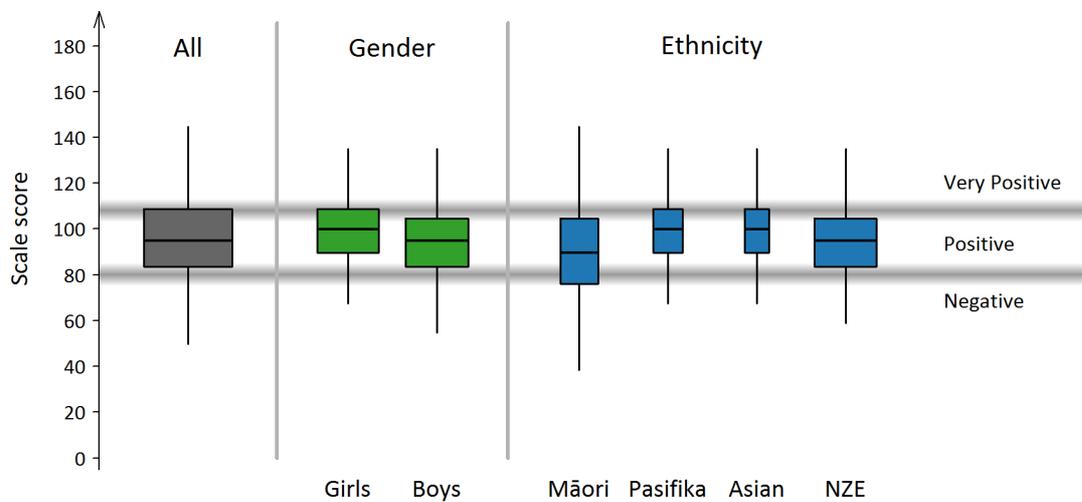
Figure 4.5   Distribution of Year 8 students' scores on the Attitude to Social Studies scale, by gender and ethnicity (NZE = NZ European)

Attitudes to social studies for students with special education needs

Figures 4.6 and 4.7 show how Year 4 and Year 8 students responded to the individual attitude statements about social studies, according to special education needs status.
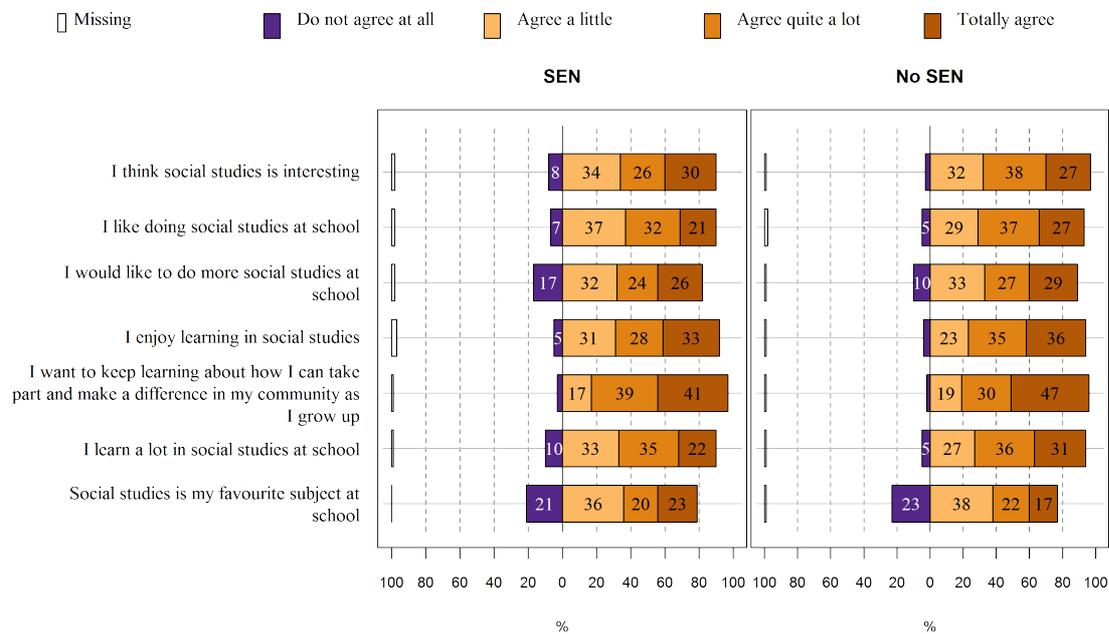
Figure 4.6 Percentage frequency of Year 4 students' responses to individual attitude statements about social studies, by special education needs
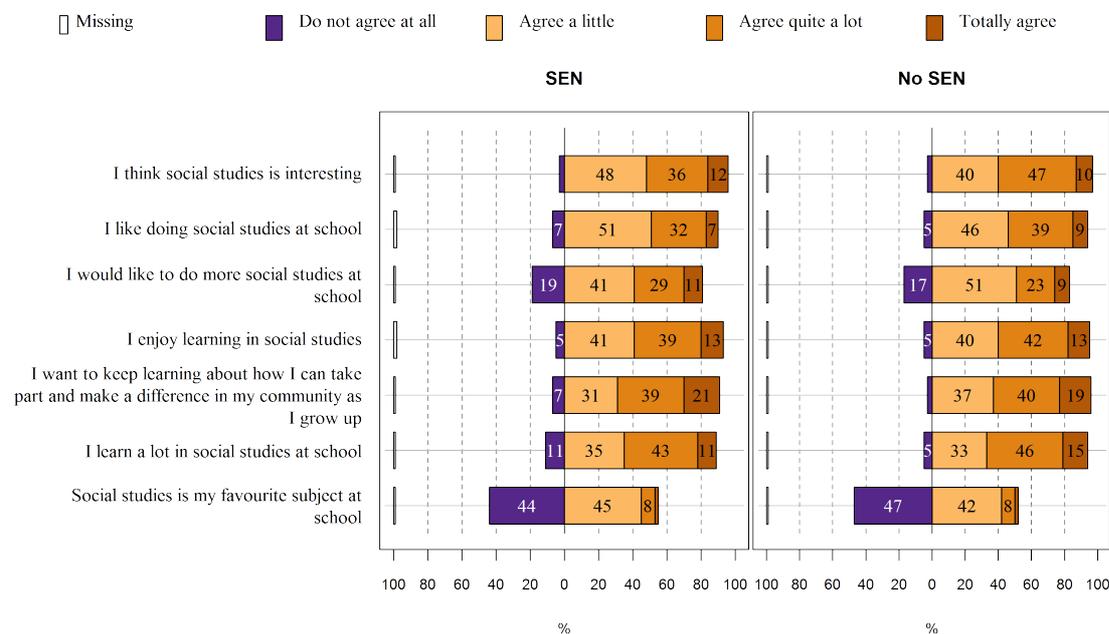
Figure 4.7 Percentage frequency of Year 8 students' responses to individual attitude statements about social studies, by special education needs

Students with special education needs generally responded positively to the individual attitude statements about social studies and their pattern of responses was similar to that for students without special education needs. As with all students, sizeable proportions of Year 4 and Year 8 students with special education needs 'did not agree at all' with the statements: 'I would like to do more social studies at school' (just under 20 percent of students at each year level) and 'Social studies is my favourite subject at school' (just under half of the students at each year level).

The distributions of Year 4 and Year 8 students' scale scores on the Attitude to Social Studies scale by special education needs are shown in Figure 4.8. The difference between the average scores on the Attitude to Social Studies scale for the two groups was not statistically significant at Year 4 or Year 8.
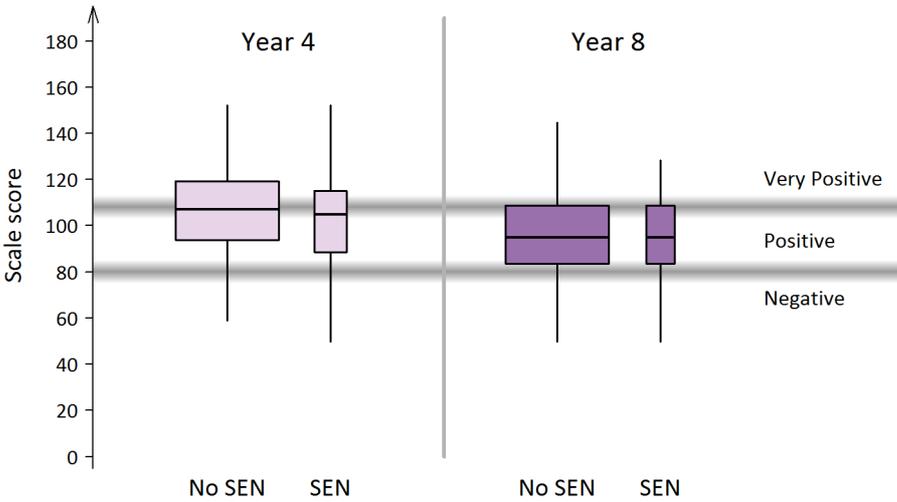
Figure 4.8   Distribution of Year 4 and Year 8 students' scores on the Attitude to Social Studies scale, by special education needs

2. Relationship between achievement and Attitude to Social Studies scale

Figures 4.9 and 4.10 show the relationship between attitudes and achievement by using the 'very positive', 'positive' and 'negative' regions of the Attitude to Social Studies scale to form three attitude groupings.
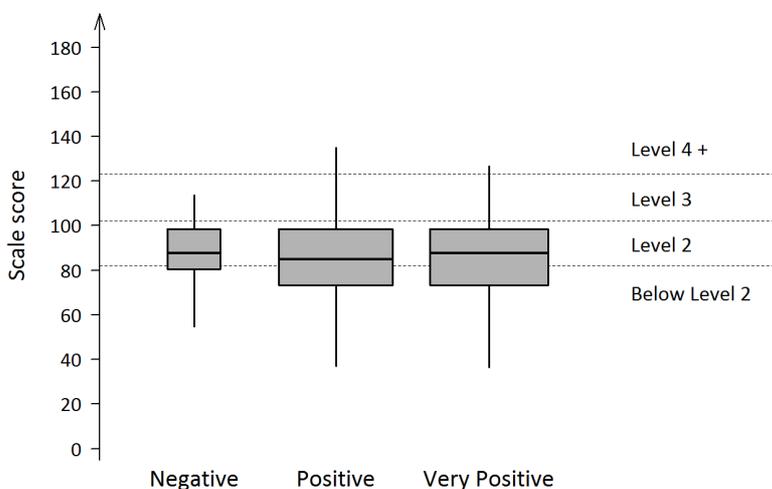
Year 4 students' achievement scores, by level on the Attitude to Social Studies scale
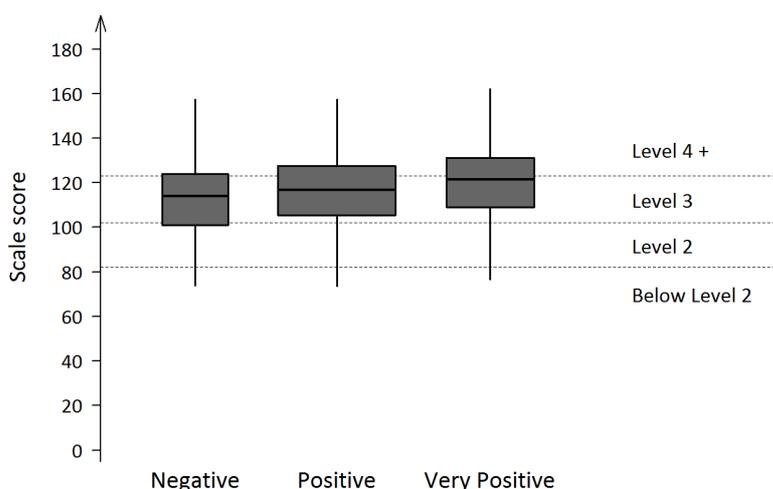
Figure 4.10 Year 8 students' achievement scores, by level on the Attitude to Social Studies scale

Students with positive attitudes achieved at similar levels on the NSS scale as the small group of students with negative attitudes. There appeared to be no association between achievement and attitude scores at Year 4 (shown by a correlation of r = -0.02 between the two measures).

At Year 8, there was a detectable association between achievement and Attitude to Social Studies scale scores. Students classed as 'very positive' on the attitude measure scored higher, on average, than those students classed as 'positive'. Students who were 'positive' scored higher, on average, than those students who were 'negative' about social studies. The correlation between achievement and Attitudes to Social Studies scale scores at Year 8 was weak but statistically significant ($r = 0.14$).

3. Opportunities and experiences to learn in social studies at school

Another section of the student questionnaire asked students about a range of opportunities and experiences to learn in social studies in school. Students rated how often they were involved in each of a range of opportunities and experiences using a 4-point scale: 'never', 'sometimes', 'often' and 'very often'. Figures 4.11 and 4.12 show how students in Year 4 and Year 8 responded to each statement.
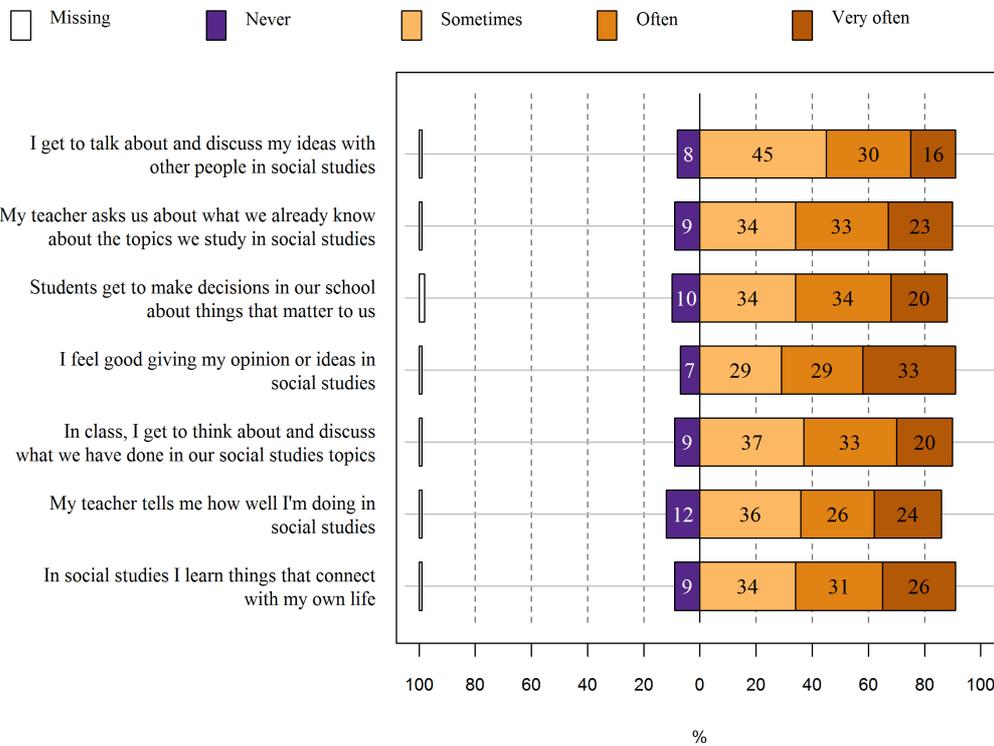
Figure 4.11 Frequency of social studies opportunities and experiences, reported by Year 4 students
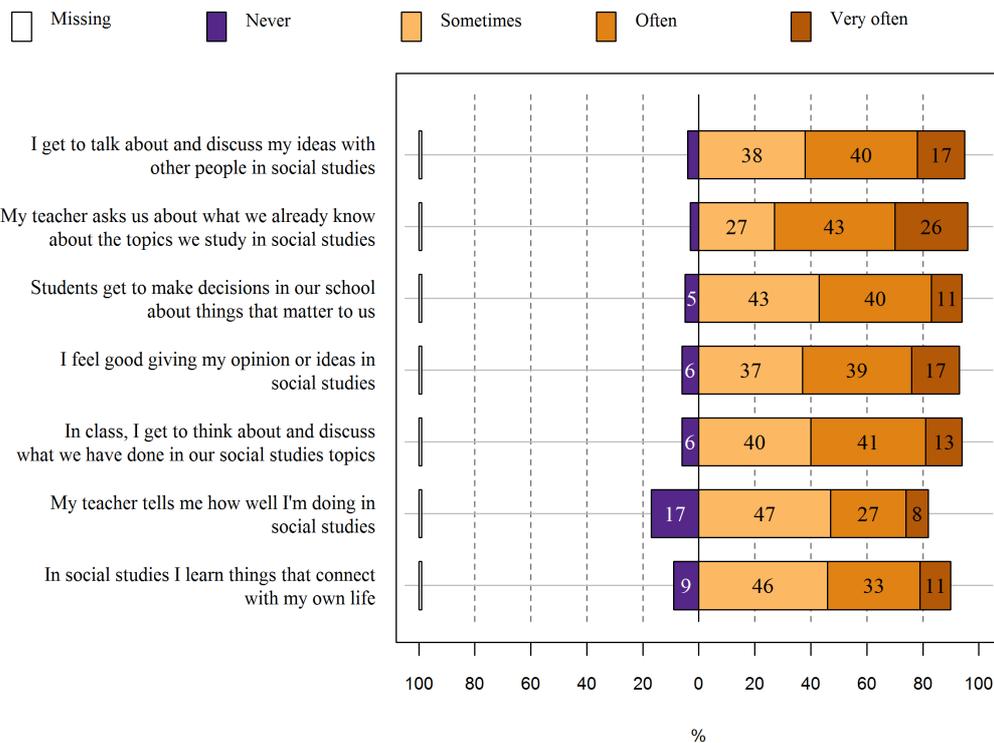
Figure 4.12 Frequency of social studies opportunities and experiences, reported by Year 8 students

The majority of Year 4 and Year 8 students reported that the learning opportunities and experiences happened 'sometimes', 'often' or 'very often'. The pattern of responses was similar for boys and girls at both year levels.

A notably large percentage of students at Year 8 responded 'never' to the statement 'My teacher tells me how well I'm doing in social studies'.

4. Relationship between achievement and opportunities to learn in social studies

The relationship between student responses to the opportunities-to-learn statements and achievement in the NSS was examined by calculating Pearson product moment correlations between the responses to each statement and achievement scores. The statements for which there were statistically significant correlations with achievement are presented in Table 4.1. However, the correlations were weak.

Table 4.1   Statistically significant relationships between Nature of Social Studies
achievement and opportunities-to-learn statements at Year 4 and Year 8

Statement	Year 4	Year 8
I get to talk about and discuss my ideas with other people in social studies	0.11	0.23
I feel good giving my opinion and ideas in social studies	0.17	0.25
My teacher asks us what we already know about the topic we study in social studies	*ns*	0.14
In class I get to think about and discuss what we have done in our social studies topics	*ns*	0.21

Note: *ns* = not significant

5. Summary

Generally, Year 4 students had more positive attitudes to social studies than Year 8 students.

At Year 8, there was a detectable association between achievement and attitudes to social studies. Students who were more positive about social studies scored higher, on average, than those students who were more negative about social studies. At Year 4, however, there was no discernible relationship.

The majority of students, including students with special education needs, reported frequently experiencing a range of activities that related to learning in social studies at school.

There was a detectable association between achievement and opportunities to learn in social studies for students at both year levels when they 'get to talk about and discuss their ideas with other people in social studies' and when they 'feel good about giving their opinion and ideas in social studies'. There was also an association detected for Year 8 students when they 'get to think about and discuss what they have done in their social studies topics' and when their teacher 'asks them what they already know about the topic they study in social studies'.

Appendix 1: Summary Statistics

Table A1.1 Achievement on the NSS scale: Summary statistics for Year 4 students

Group	Actual sample size	Effective sample size	Mean	Confidence interval for the mean	Standard deviation
All	791	530	83	(81.5, 85.0)	21
Gender					
Girls	416	279	84	(81.5, 87.0)	22
Boys	375	251	83	(80.0, 85.0)	20
Ethnicity					
Māori	179	120	76	(71.5, 80.0)	24
Non-Māori	612	410	86	(84.0, 87.5)	19
Pasifika	86	58	67	(60.5, 73.0)	24
Non-Pasifika	705	472	85	(83.5, 87.0)	20
Asian	89	60	80	(75.5, 85.5)	20
Non-Asian	702	470	84	(82.0, 85.5)	21
NZE	492	330	89	(87.5, 91.0)	17
Non-NZE	299	200	74	(70.5, 77.0)	24
Decile band					
Low decile	223	149	70	(66.5, 74.0)	24
Mid decile	264	177	85	(83.0, 88.0)	17
High decile	304	204	91	(89.0, 93.5)	17
School type					
Contributing school	495	332	83	(80.0, 85.0)	22
Full primary school	264	177	86	(83.0, 88.0)	18
Composite school (Years 1–15)	32	21	80	(71.0, 88.0)	20
Special education needs					
No SEN	707	474	85	(83.0, 86.5)	20
On referral for SEN	4	3	74	(31.5, 117.0)	36
Moderate SEN	76	51	72	(65.0, 79.5)	26
High SEN	4	3	66	(52.0, 79.0)	11
SEN (combined)	84	56	72	(65.0, 78.5)	26

Table A1.2 Achievement on the NSS scale: Summary statistics for Year 8 students

Group	Actual sample size	Effective sample size	Mean	Confidence interval for the mean	Standard deviation
All	793	531	116	(114.5, 118.0)	19
Gender					
Girls	384	257	118	(115.5, 120.0)	19
Boys	409	274	115	(113.0, 117.5)	20
Ethnicity					
Māori	181	121	109	(104.5, 112.5)	22
Non-Māori	612	410	119	(117.0, 120.5)	18
Pasifika	96	64	108	(103.0, 113.0)	20
Non-Pasifika	697	467	118	(116.0, 119.0)	19
Asian	65	44	117	(112.0, 121.0)	15
Non-Asian	728	488	116	(114.5, 118.0)	20
NZE	472	316	121	(118.5, 122.5)	17
Non-NZE	321	215	110	(107.5, 113.0)	21
Decile band					
Low decile	143	96	104	(99.5, 108.5)	22
Mid decile	342	229	115	(113.0, 117.5)	18
High decile	308	206	124	(121.5, 126.0)	16
School type					
Full primary school	276	185	116	(113.0, 119.0)	20
Intermediate school	384	257	116	(114.0, 118.5)	18
Secondary school (Years 7–15)	86	58	118	(113.5, 121.5)	15
Composite school (Years 1–15 & 7–10)	47	31	119	(110.0, 128.5)	26
Special education needs					
No SEN	738	494	118	(116.0, 119.0)	19
On referral for SEN	3	2	103	(82.0, 123.5)	15
Moderate SEN	49	33	98	(91.0, 105.5)	21
High SEN	3	2	123	(88.0, 158.0)	25
SEN (combined)	55	37	100	(93.0, 107.0)	22

Table A1.3   Achievement on the NSS scale: Differences between subgroup means for Year 4 students

Subgroup 1	Subgroup 1 effective sample size	Subgroup 2	Subgroup 2 effective sample size	Difference in means	Confidence interval for difference in means	Effect size
Gender						
Girls	279	Boys	251	2	(-2.0, 5.0)	0.08
Ethnicity						
Māori	120	Non-Māori	410	**-10**	(-15.0, -5.5)	-0.49
Pasifika	58	Non-Pasifika	472	**-19**	(-25.0, -12.5)	-0.93
Asian	60	Non-Asian	470	-3	(-9.0, 2.0)	-0.17
NZE	330	Non-NZE	200	**16**	(12.0, 19.5)	0.81
Decile band						
High decile	204	Mid decile	177	**6**	(2.5, 9.5)	0.36
High decile	204	Low decile	149	**21**	(16.5, 25.5)	1.05
Mid decile	177	Low decile	149	**15**	(10.5, 20.0)	0.74
School type						
Composite school (Years 1–15)	21	Contributing school	332	-3	(-12.0, 6.0)	-0.13
Composite school (Years 1–15)	21	Full primary school	177	-6	(-15.0, 3.0)	-0.33
Contributing school	332	Full primary school	177	-3	(-6.5, 0.5)	-0.15
Special education needs						
No SEN	474	SEN (combined)	56	**13**	(6.0, 20.0)	0.63

Table A1.4   Achievement on the NSS scale: Differences between subgroup means for Year 8 students

Subgroup 1	Subgroup 1 effective sample size	Subgroup 2	Subgroup 2 effective sample size	Difference in means	Confidence interval for difference in means	Effect size
Gender						
Girls	257	Boys	274	3	(-0.5, 6.0)	0.13
Ethnicity						
Māori	121	Non-Māori	410	**-10**	(-14.5, -6.0)	-0.54
Pasifika	64	Non-Pasifika	467	**-10**	(-15.0, -4.5)	-0.50
Asian	44	Non-Asian	488	0	(-4.5, 5.0)	0.02
NZE	316	Non-NZE	215	**10**	(7.0, 14.0)	0.56
Decile band						
High decile	206	Mid decile	229	**8**	(5.0, 11.5)	0.49
High decile	206	Low decile	96	**20**	(14.5, 24.5)	1.08
Mid decile	229	Low decile	96	**11**	(6.5, 16.0)	0.59
School type						
Composite school (Years 1–15 & 7–10)	31	Full primary school	185	3	(-6.5, 13.0)	0.15
Composite school (Years 1–15 & 7–10)	31	Intermediate school	257	3	(-6.5, 12.5)	0.17
Composite school (Years 1–15 & 7–10)	31	Secondary school (Years 7–15)	58	2	(-8.5, 11.5)	0.08
Full primary school	185	Intermediate school	257	0	(-3.5, 3.5)	-0.00
Full primary school	185	Secondary school (Years 7–15)	58	-2	(-6.5, 3.5)	-0.08
Intermediate school	257	Secondary school (Years 7–15)	58	-2	(-6.0, 3.0)	-0.09
Special education needs						
No SEN	494	SEN (combined)	37	**18**	(10.5, 24.5)	0.93

Table A1.5   Achievement on the NSS scale: Differences between means for Year 4 and
Year 8 by subgroup

Group	Year 8 effective sample size	Year 4 effective sample size	Difference in means	Confidence interval for difference in means	Effect size
All	531	530	**33**	(30.5, 35.5)	1.63
Gender					
Girls	257	279	**33**	(30.0, 37.0)	1.64
Boys	274	251	**33**	(29.0, 36.0)	1.64
Ethnicity					
Māori	121	120	**33**	(27.0, 38.5)	1.43
Pasifika	64	58	**41**	(33.5, 49.0)	1.89
Asian	44	60	**36**	(29.5, 43.0)	2.04
NZE	316	330	**31**	(28.5, 34.0)	1.86
Decile band					
Low decile	96	149	**34**	(28.0, 39.5)	1.45
Mid decile	229	177	**30**	(26.5, 33.0)	1.70
High decile	206	204	**32**	(29.0, 35.5)	1.95
Special education needs					
No SEN	494	474	**33**	(30.5, 35.0)	1.71
On referral for SEN	2	3	28	(-19.0, 76.0)	0.96
Moderate SEN	33	51	**26**	(16.0, 36.5)	1.08
High SEN	2	3	**58**	(20.0, 95.0)	3.20
SEN (combined)	37	56	**28**	(18.5, 38.0)	1.16

Table A1.6   Social Sciences Curriculum Levels: Year 4 students

Group	Actual sample size	Effective sample size	Percentage of students at <L2	Confidence interval for <L2 percentage	Percentage of students at L2	Confidence interval for L2 percentage	Percentage of students at L3	Confidence interval for L3 percentage	Percentage of students at L4+	Confidence interval for L4+ percentage
All	791	530	37%	(33.0%, 41.5%)	47%	(42.5%, 51.0%)	15%	(12.0%, 18.0%)	1%	(0.0%, 2.0%)
Gender										
Girls	416	279	35%	(29.0%, 40.0%)	46%	(40.0%, 51.5%)	18%	(13.5%, 22.5%)	2%	(0.0%, 3.0%)
Boys	375	251	40%	(34.0%, 46.5%)	47%	(41.5%, 53.5%)	12%	(8.0%, 16.0%)	0%	(0.0%, 1.0%)
Ethnicity										
Māori	179	120	49%	(39.5%, 57.5%)	39%	(30.5%, 48.0%)	12%	(6.5%, 18.0%)	-	-
Non-Māori	612	410	34%	(29.5%, 38.5%)	49%	(44.0%, 53.5%)	16%	(12.5%, 19.5%)	1%	(0.0%, 2.5%)
Pasifika	86	58	63%	(50.5%, 75.5%)	31%	(19.5%, 43.5%)	6%	(0.0%, 12.0%)		
Non-Pasifika	705	472	34%	(30.0%, 38.5%)	48%	(44.0%, 53.0%)	16%	(13.0%, 19.5%)	1%	(0.0%, 2.0%)
Asian	89	60	48%	(35.5%, 61.0%)	44%	(31.0%, 56.5%)	8%	(1.0%, 14.5%)		
Non-Asian	702	470	36%	(31.5%, 40.0%)	47%	(42.5%, 51.5%)	16%	(13.0%, 19.5%)	1%	(0.0%, 2.0%)
NZE	492	330	26%	(21.5%, 31.0%)	53%	(48.0%, 59.0%)	19%	(14.5%, 23.0%)	2%	(0.5%, 3.0%)
Non-NZE	299	200	56%	(48.5%, 62.5%)	35%	(28.5%, 41.5%)	9%	(5.5%, 13.5%)	-	-
Decile band										
Low decile	223	149	61%	(52.5%, 68.5%)	30%	(23.0%, 38.0%)	9%	(4.5%, 13.5%)	-	-
Mid decile	264	177	34%	(27.0%, 41.0%)	55%	(48.0%, 62.5%)	9%	(5.0%, 14.0%)	1%	(0.0%, 2.5%)
High decile	304	204	23%	(17.0%, 29.0%)	51%	(44.0%, 57.5%)	25%	(19.0%, 30.5%)	2%	(0.0%, 3.5%)
School type										
Composite school (Years 1–15)	32	21	44%	(23.0%, 64.5%)	44%	(23.0%, 64.5%)	12%	(0.0%, 26.5%)	-	-
Contributing school	495	332	39%	(34.0%, 44.5%)	44%	(38.5%, 49.5%)	16%	(11.5%, 19.5%)	1%	(0.0%, 2.5%)
Full primary school	264	177	33%	(26.0%, 40.0%)	52%	(44.0%, 59.0%)	15%	(9.5%, 20.0%)	1%	(0.0%, 2.0%)
Special education needs										
SEN (combined)	84	56	50%	(37.0%, 63.0%)	46%	(33.5%, 59.5%)	4%	(0.0%, 8.5%)	-	-
No SEN	707	474	36%	(31.5%, 40.0%)	47%	(42.0%, 51.0%)	17%	(13.0%, 20.0%)	1%	(0.0%, 2.0%)

Table A1.7   Social Sciences Curriculum Levels: Year 8 students

Group	Actual sample size	Effective sample size	Percentage of students at <L2	Confidence interval for <L2 percentage	Percentage of students at L2	Confidence interval for L2 percentage	Percentage of students at L3	Confidence interval for L3 percentage	Percentage of students at L4+	Confidence interval for L4+ percentage
All	793	531	5%	(3.0%, 7.0%)	14%	(11.0%, 16.5%)	43%	(39.0%, 47.0%)	38%	(34.0%, 42.5%)
Gender										
Girls	384	257	4%	(2.0%, 7.0%)	13%	(8.5%, 17.0%)	42%	(36.0%, 48.0%)	41%	(34.5%, 46.5%)
Boys	409	274	5%	(2.5%, 8.0%)	15%	(10.5%, 19.0%)	44%	(38.0%, 49.5%)	36%	(30.5%, 42.0%)
Ethnicity										
Māori	181	121	11%	(5.5%, 16.5%	20%	(13.5%, 27.5%)	43%	(34.5%, 52.0%)	25%	(17.5%, 33.0%)
Non-Māori	612	410	3%	(1.5%, 5.0%)	12%	(8.5%, 15.0%)	43%	(38.0%, 48.0%)	42%	(37.5%, 47.0%)
Pasifika	96	64	11%	(3.5%, 19.0%)	25%	(14.5%, 35.5%)	43%	(30.5%, 55.0%)	21%	(11.0%, 31.0%)
Non-Pasifika	697	467	4%	(2.0%, 6.0%)	12%	(9.0%, 15.0%)	43%	(38.5%, 47.5%)	41%	(36.5%, 45.0%)
Asian	65	44	2%	(0.0%, 5.0%)	9%	(0.5%, 18.0%)	55%	(40.5%, 70.0%)	34%	(20.0%, 48.0%)
Non-Asian	728	488	5%	(3.0%, 7.0%)	14%	(11.0%, 17.0%)	42%	(37.5%, 46.5%)	39%	(34.5%, 43.0%)
NZE	472	316	2%	(0.5%, 3.0%)	10%	(7.0%, 13.5%)	42%	(37.0%, 48.0%)	46%	(40.5%, 51.5%
Non-NZE	321	215	10%	(5.5%, 13.5%)	19%	(14.0%, 24.0%)	44%	(37.5%, 50.5%)	27%	(21.5%, 33.5%)
Decile band										
Low decile	143	96	15%	(8.0%, 22.5%)	24%	(16.0%, 33.0%)	43%	(33.5%, 53.5%)	17%	(9.5%, 24.5%)
Mid decile	342	229	4%	(1.5%, 6.5%)	15%	(10.5%, 19.5%)	48%	(41.0%, 54.0%)	33%	(27.0%, 39.5%)
High decile	308	206	1%	(0.0%, 2.5%)	7%	(4.0%, 11.0%)	38%	(31.0%, 44.5%)	54%	(47.0%, 60.5%)
School type										
Composite school (Years 1–15 & 7–10)	47	31	11%	(0.0%, 21.5%)	4%	(0.0%, 11.5%)	38%	(21.5%, 55.5%)	47%	(29.5%, 64.0%)
Full primary school	276	185	5%	(2.0%, 8.5%)	16%	(10.5%, 21.0%)	39%	(31.5%, 46.0%)	40%	(33.0%, 47.5%)
Intermediate school	384	257	5%	(2.5%, 7.5%)	14%	(9.5%, 17.5%)	45%	(38.5%, 50.5%)	37%	(31.0%, 43.0%)
Secondary school (Years 7–15)	86	58			14%	(5.0%, 23.0%)	52%	(39.5%, 65.0%)	34%	(21.5%, 46.0%)
Special education needs										
SEN (combined)	55	37	20%	(7.0%, 33.0%)	27%	(13.0%, 41.5%)	45%	(29.5%, 61.5%)	7%	(0.0%, 15.5%)
No SEN	738	494	4%	(2.0%, 5.5%)	13%	(10.0%, 15.5%)	43%	(38.5%, 47.0%)	41%	(36.5%, 45.0%)

Table A1.8 Attitude to Social Studies: Summary statistics for Year 4 students

Group	Actual sample size	Effective sample size	Mean	Confidence interval for the mean	Standard deviation
All	2,174	1,457	105	(104.5, 106.5)	20
Gender					
Girls	1,159	777	108	(106.5, 109.0)	18
Boys	1,015	680	103	(101.0, 104.0)	22
Ethnicity					
Māori	482	323	106	(104.0, 108.0)	19
Non-Māori	1,692	1,134	105	(104.0, 106.5)	21
Pasifika	270	181	111	(108.0, 113.0)	17
Non-Pasifika	1,904	1,276	105	(103.5, 106.0)	20
Asian	267	179	108	(105.5, 111.0)	19
Non-Asian	1,907	1,278	105	(104.0, 106.0)	20
NZE	1,311	878	104	(102.5, 105.5)	21
Non-NZE	863	578	107	(106.0, 109.0)	19
Decile band					
Low decile	591	396	110	(107.5, 111.5)	20
Mid decile	694	465	104	(102.0, 106.0)	21
High decile	889	596	104	(102.0, 105.0)	20
School type					
Contributing school	1,401	939	105	(104.0, 106.5)	20
Full primary school	700	469	105	(103.0, 107.0)	20
Composite school (Years 1–15)	73	49	109	(103.5, 114.5)	20
Special education needs					
No SEN	1,981	1,327	106	(104.5, 107.0)	20
On referral for SEN	18	12	102	(92.0, 111.5)	17
Moderate SEN	167	112	103	(99.0, 107.0)	22
High SEN	7	5	79	(53.5, 104.5)	28
SEN (combined)	192	129	102	(98.0, 105.5)	22

Table A1.9   Attitude to Social Studies: Summary Statistics for Year 8 students

Group	Actual sample size	Effective sample size	Mean	Confidence interval for the mean	Standard deviation
All	2,187	1,465	95	(93.5, 95.5)	20
Gender					
Girls	1,073	719	97	(96.0, 98.5)	18
Boys	1,114	746	92	(90.5, 93.5)	21
Ethnicity					
Māori	478	320	90	(88.0, 92.5)	20
Non-Māori	1,709	1,145	96	(94.5, 97.0)	19
Pasifika	291	195	101	(97.5, 103.5)	20
Non-Pasifika	1,896	1,270	94	(92.5, 95.0)	20
Asian	205	137	98	(95.5, 101.5)	18
Non-Asian	1,982	1,328	94	(93.0, 95.5)	20
NZE	1,295	868	94	(92.5, 95.5)	19
Non-NZE	892	598	95	(94.0, 97.0)	21
Decile band					
Low decile	386	259	97	(94.0, 99.5)	22
Mid decile	927	621	93	(91.5, 94.5)	20
High decile	874	586	95	(93.5, 96.5)	19
School type					
Full primary school	691	463	96	(94.0, 97.5)	20
Intermediate school	1,117	748	94	(92.5, 95.5)	19
Secondary school (Years 7–15)	250	168	95	(91.5, 98.0)	22
Composite school (Years 1–15 & 7–10)	129	86	93	(89.0, 98.0)	21
Special education needs					
No SEN	2,037	1,365	95	(93.5, 96.0)	20
On referral for SEN	7	5	88	(78.0, 99.0)	11
Moderate SEN	135	90	93	(88.5, 97.0)	21
High SEN	7	5	98	(82.0, 114.5)	18
SEN (combined)	149	100	93	(88.5, 96.5)	20

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