New Zealand Schools Attendance Survey

Term 2, 2017 Results

Contents

Overview

This report provides a picture of attendance in New Zealand schools to help schools, Communities of Learning | Kāhui Ako and other sector representatives understand patterns of attendance and how these can affect achievement. In addition to attendance statistics, this report analyses the relationship between the attainment of NCEA Level 1 among Year 11 students in 2016, and their attendance in that and previous years.

Alongside the legal responsibility that schools, parents and guardians have for ensuring children are attending school, attendance is vital because every day a student is not at school is a day they are not learning. Therefore the Ministry provides a range of support for schools to address poor attendance, including the integrated Attendance Service.

This report uses two different key measures of attendance:

- The percentage of half-days attended by a student. A half-day is two hours of class time within a calendar day. A student is considered to be **attending regularly** if they were present at school for more than 90% of all half-days in Term 2.[1]

- The percentage of class time missed by a group of students. This is further broken down into justified and unjustified absence, and individual reasons for absence within these categories. This measure better accounts for specific types of absences that may not make up a half-day but still amount to a significant amount of missed class time over the course of the term.

All state, state-integrated and partnership schools were invited to submit Term 2 attendance data. Of 2,413 schools, 1,920 (80%) provided this data. This accounts for about 640,000 students, or 84% of the student population. This report covers attendance in Term 2 only.

Key Points
- Term 2 attendance in Year 11 is strongly linked with attainment of NCEA Level 1.

- In Term 2 of 2017, 63% of students were attending regularly (more than 90% of all half-days). This was lower than in 2016 (67%), mainly due to an increase in absence due to medical reasons.

- The decrease in attendance was evident among schools common to both the 2016 and 2017 surveys, which suggests that this decrease was real and not due to a change in the composition of schools responding to the survey.

- Students who identified as Māori and Pasifika had lower rates of regular attendance than other ethnicities (50% and 52%, respectively).

- Students in high-decile schools attended more than those in lower-decile schools, with 72% attending regularly in decile 10 schools compared to 47% in decile 1 schools.

- Attendance declines in the senior secondary years, with female students attending less than male students in Years 11 to 13.

- Both justified and unjustified absences were higher in Term 2 of 2017 than in the same term in 2016. Over a longer time span, unjustified absences have increased steadily, while justified absences have been more variable.

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[1] This is a heuristic; it does not mean that the Ministry considers 90% attendance to be enough. However, some non-attendance is expected, especially due to illness.

Why Attendance Matters

Attendance at school is important because it allows access to the curriculum. International surveys such as PISA show that opportunity to learn through accessing curriculum content is one of the strongest drivers of achievement in school.

Students' rate of attainment of NCEA Level 1 in Year 11 was modelled against their attendance rates in Term 2. This analysis also included demographic factors such as gender, ethnicity and a proxy for socio-economic status (school decile).

Attendance is linked to achievement

Attendance in Year 11 has a strong relationship with NCEA level 1 attainment. About 90% of students attending every class in Term 2 attained NCEA level 1 that year, compared to 60% of those who missed a quarter of the term (Figure 1).
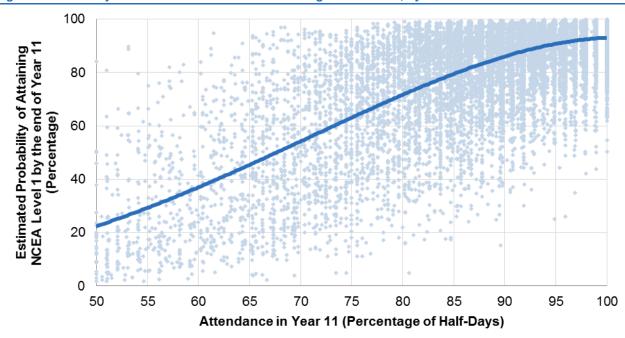
Figure 1: Probability of Year 11 students in 2016 attaining NCEA level 1, by attendance in Term 2

Interpretations of this data should be made with caution. While attendance and achievement are positively related, and students that attend school more often usually have higher achievement, this does not imply that students that attend school more often achieve better results because of their higher attendance. Some of this increase may be explained by unmeasured factors that predict both attendance and attainment (eg. motivation).

It is never too late to improve

Attendance in Year 10 was also strongly linked to attainment of NCEA level 1 in Year 11. However, students with lower levels of attendance in Year 10 and higher attendance in Year 11 had a much higher rate of attaining NCEA level 1 than those who had lower attendance in both years (Figure 2). This suggests that while students with lower attendance prior to Year 11 are at a disadvantage, their likelihood of achieving increases if attendance increases.
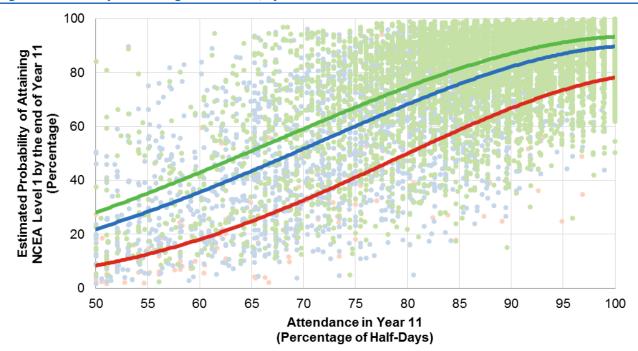
Figure 2: Probability of attaining NCEA level 1, by Term 2 attendance in Year 11 and Year 10

Students Attending Regularly

This section looks at the percentage of half-days attended by each student. A student is considered to be **attending regularly** if they were present at school for more than 90% of all half-days in Term 2.
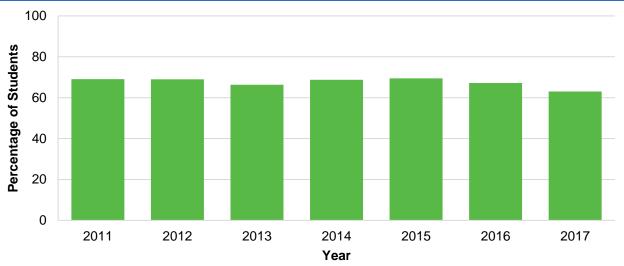
Nearly two thirds attended regularly

In Term 2 of 2017, 63% of students attended regularly (Figure 3). This was just under two thirds of all students, or approximately 481,000 of 763,000 students.

Fewer students attended regularly than in 2016 (67%). The biggest contributing factor to this change was an increase in absences due to illness and medical reasons.[2]

There was a similar change in attendance among schools that participated in both 2016 and 2017 (67% of schools). This suggests that the decrease was real and not due to a change in the composition of schools responding to the survey.
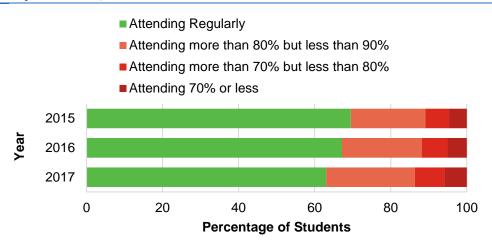
Figure 3: Students Attending School Regularly, Term 2

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[2] See Figure 12: Time Absent from Class for Justified Reasons, Term 2.

The proportion of students close to attending regularly (80-90% of half-days) was 24% in Term 2 of 2017. A further 8% attended 70-80% of half-days, with 6% attending 70% or less. All three groups accounted for a greater proportion of students in 2017 than in either 2015 or 2016 (Figure 4).
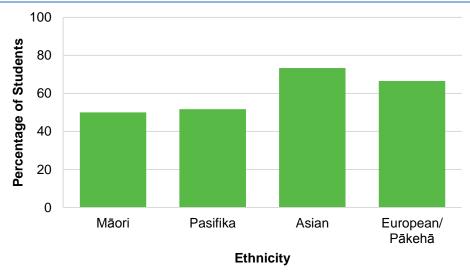
Figure 4: Half-day Attendance, Term 2

Priority learners had the lowest attendance[3]

As shown in Figure 5, students who identified as Māori had the lowest rate of regular attendance in Term 2 of 2017 (50%), followed by those who identified as Pasifika (52%). This pattern is consistent with previous years.

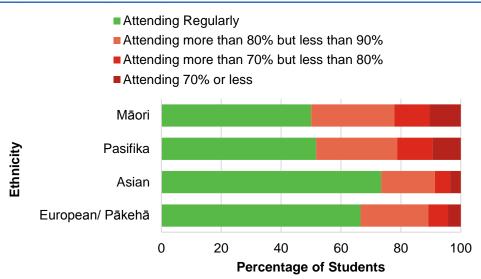**Figure 5: Students Attending School Regularly by Ethnicity, Term 2 2017**

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[3] This data uses total response ethnicity; students who identified in more than one ethnic group have been counted in each ethnic group, but only once in the total.

The proportion of students attending 80% or less was twice as large in the priority ethnic groups as it was in other ethnicities (Figure 6).

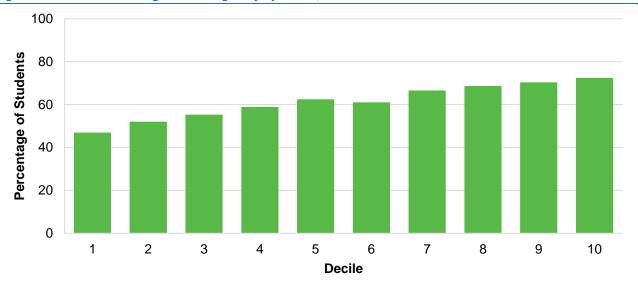**Figure 6: Half-Day Attendance by Ethnicity, Term 2 2017**

Socio-economic status and attendance

School deciles indicate the extent to which schools draw their students from low socio-economic communities. Decile 1 schools are the 10% of schools with the highest proportion of students from low socio-economic communities, whereas decile 10 schools are the 10% of schools with the lowest proportion of these students. This measure is used as a proxy for the socio-economic status of students in the school community.

In general, attendance correlates with school decile. In Term 2 of 2017, at decile 10 schools, 72% of students were attending regularly, compared to 47% at decile 1 schools (Figure 7). There was, on average, about a three percentage point difference between one decile and the next, and a 25 percentage point difference between deciles 1 and 10.

Figure 7: Students Attending School Regularly by Decile, Term 2 2017

Attendance falls in senior secondary

The percentage of students who attended regularly increases from Year 1 to Year 6 and then tends to fall through intermediate and secondary years (Figure 8). In the senior secondary years, from Year 11 to Year 13, there is a sharp decline in attendance. The same pattern has been observed in previous years. While enrolment in school is not compulsory from age 16 (Year 12 for most students), attendance is compulsory as long as the student is enrolled.
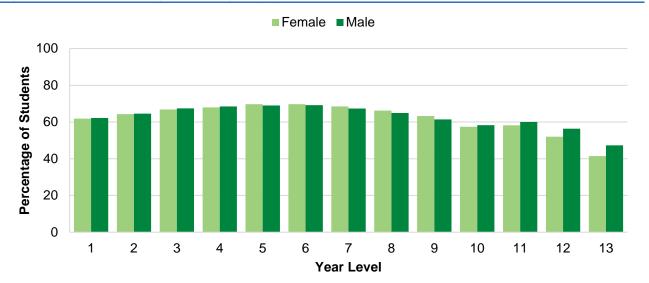
Figure 8: Students Attending School Regularly by Gender and Year Level, Term 2 2017

Male students attend more often than female students in senior secondary

There is no obvious gender difference in students attending regularly from Years 1 to 10; however a noticeable difference starts to emerge in senior secondary schooling, where female students have lower attendance rates than male students. This difference is largest in Year 13, where 41% of female students attended regularly, compared to 47% of male students. These trends have been consistent since the Term 2 data collection began in 2011.

Primary schools had the highest attendance

Full primary and contributing primary had the highest levels of regular attendance in Term 2 of 2017, at 67%. Secondary (Year 9-15) schools, with the highest proportion of senior secondary students, had 55% attending regularly, the lowest of any school type (Figure 9). This follows from the pattern of attendance by year level, as most school types are defined by the year levels of students attending them.

Special schools had among the lowest levels of attendance, with 56% attending regularly. However these schools had more justified absence and less unjustified absence than other schools. This is likely related to the fact that special schools support high needs students.
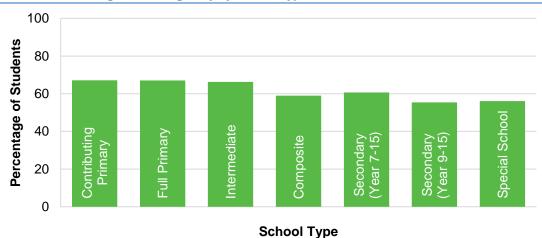
Figure 9: Students Attending School Regularly by School Type,[4] Term 2 2017

Attendance across regions

The three South Island education regions all had above-average levels of attendance. Canterbury and Chatham Islands had the highest percentage attending regularly, at 69% (Figure 10). Tai Tokerau had the lowest percentage attending regularly (51%), followed by Hawke's Bay, Tairāwhiti (58%), and Waikato (58%). These same regions had the lowest percentage attending regularly in previous years, while the South Island regions have consistently had relatively high attendance.
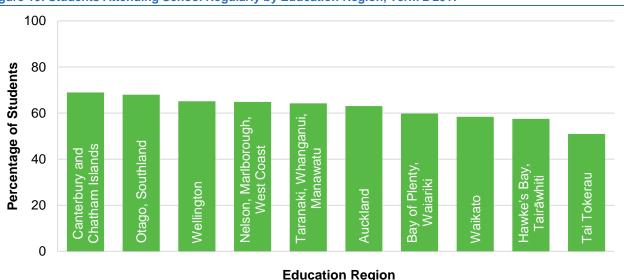
Figure 10: Students Attending School Regularly by Education Region, Term 2 2017

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[4] The "Composite" category includes both Composite (Year 1-15) and Restricted Composite (Year 7-10) schools.

Why students are absent

This section looks at the percentage of class time missed by students, and the reasons for absence. Student absences can be recorded as either justified or unjustified, depending on the explanation given and the school's attendance policy. This measure is not comparable to the percentage of half-days.

In Term 2 of 2017, students missed 10% of all class time on average. Justified absences accounted for 6% of class time, while unjustified absences made up 4%. The percentage of time missed was higher than in Term 2 of 2016 (9%). Both justified and unjustified absences increased, however the change was larger for justified absences. Over a longer time span, unjustified absences have increased steadily, while justified absences have been more variable (Figure 11).
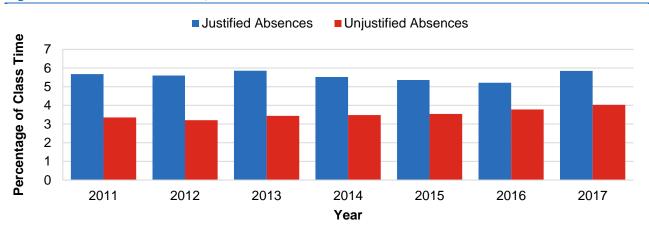
Figure 11: Time Absent from Class, Term 2

Illness up from previous years

Absences for medical reasons accounted for almost 5% of all class time in Term 2 of 2017, compared to 4% in each of the three previous years (Figure 12). Other justified absences have decreased slightly over this time. Absences due to illness and medical reasons accounted for about four-fifths of justified absences and almost half of all absences.
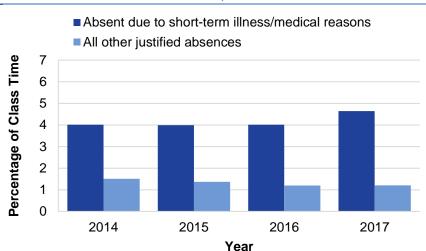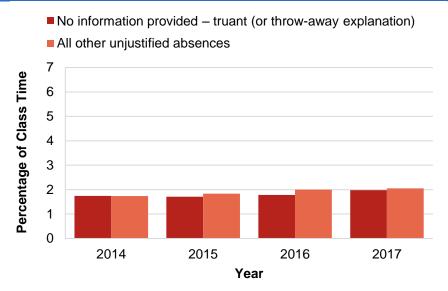
Figure 12: Time Absent from Class for Justified Reasons, Term 2

Unjustified absences tracking up

Absences due to truancy or unexplained reasons made up just under half of all unjustified absences, and one-fifth of all absences, in Term 2 of 2017. The percentage of class time missed due to truancy increased from 1.8% in 2016 to 2.0% in 2017 (Figure 13).

Figure 13: Time Absent from Class due to Unjustified Absences, Term 2

Holidays during term time

The amount of absence due to students going on holidays also increased in 2017. Holidays during term time were recorded separately starting in 2015; prior to this they could be considered justified or unjustified at the school's discretion. The increase in this category may be due to schools continuing to adopt the new code (Holiday during term time), rather than a real increase in holidays. There has been a corresponding decrease since 2014 in other codes that may have been used in this situation, including justified absences within school policy, and explained but unjustified absences (Figure 14).

In Term 2 of 2017, 40,700 students were recorded as missing at least one half-day due to holidays. The average length of such an absence was 4.8 days, or just under a week of school.

Figure 14: Time Absent from Class due to Holidays and related reasons, Term 2

Reason for Absence	Percentage of class time			
	2014	2015	2016	2017
Holiday during term time	N/A	0.4	0.6	0.7
Justified absence – reason for absence within the school policy	1.3	1.2	1.1	1.1
Absent with an explained but unjustified reason	1.3	1.1	1.0	1.0

More illness later in the term

The amount of absence for medical reasons increased over the last four weeks of the term (Figure 15), a trend that was not seen in earlier years. These absences peaked in the final week of term, when they accounted for 6% of all class time.

By the end of Term 2, the week ending 9 July 2017, influenza-like illness (ILI) consultation rates had increased significantly from the previous week and were above the seasonal threshold.[5] The reported weekly ILI incidence was 52 cases per 100,000 people, compared to 17 in 2016. Influenza rates were seen to be highest among young (0-4 years) and school aged children (5-19 years).

Figure 15: Time Absent from Class due to Illness, Truancy and holidays by Week, Term 2 2017

More holidays, truancy in final week

The percentage of class time missed due to holidays in the final week of term was more than double the average rate. These absences were also relatively high in the previous week, as well as the first week of the term.

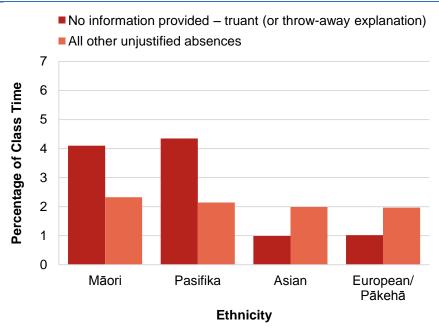Truancy followed a similar pattern to holidays, with a sharp increase at the end of the term.

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[5] Institute of Environmental Science and Research Limited. 2017. Community and Hospital Surveillance: ILI, SARI, Influenza and Respiratory Pathogens.
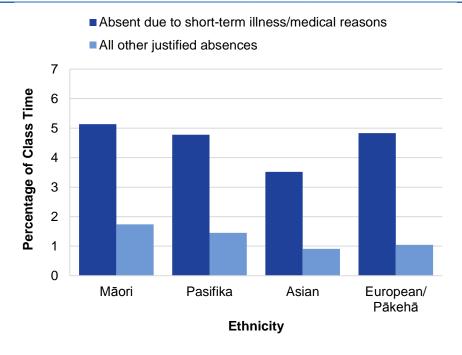
Why priority learners attend less[6]

Students who identified as Māori or Pasifika spent more than twice as long away from class for unjustified reasons than students of other ethnicities (Figure 16). However, priority learners took fewer holidays during the term.

Figure 16: Time Absent from Class for Unjustified Reasons by Ethnicity, Term 2 2017

Legend:
- No information provided – truant (or throw-away explanation)
- All other unjustified absences

Priority learners had more justified absences overall than those of other ethnicities. However, their rate of absence due to illness was similar to that of European/Pākehā students (Figure 17).

Figure 17: Time Absent from Class for Justified Reasons by Ethnicity, Term 2 2017

Legend:
- Absent due to short-term illness/medical reasons
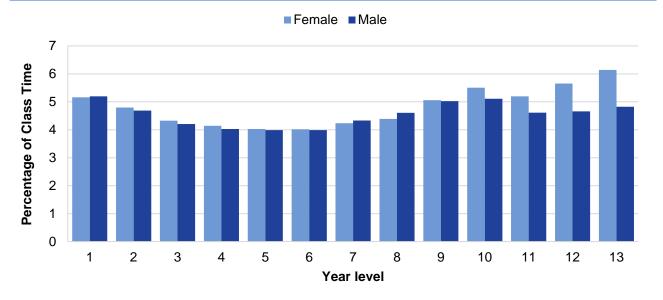- All other justified absences

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[6] This data uses total response ethnicity; students who identified in more than one ethnic group have been counted in each ethnic group, but only once in the total.

Gender difference in senior secondary

In Years 11-13, female students had more absences than male students for illness and medical reasons (Figure 18).

Figure 18: Time Absent from Class due to Medical Reasons by Gender and Year Level, Term 2 2017

There was little difference in unjustified absences between the genders, however male students were truant slightly more often than female students in senior secondary (Figure 19).

Figure 19: Time Absent from Class due to Truancy by Gender and Year Level, Term 2 2017

Lower decile schools had the most truancy

The percentage of class time missed due to truancy ranged from 6.9% in Decile 1 schools to 0.4% in Decile 10 schools (Figure 20). The figure for Decile 1 may be an overestimate, possibly due to the recording of reasons for student absences (see the commentary on illness below). The amount of absence for other unjustified reasons was similar across all deciles.
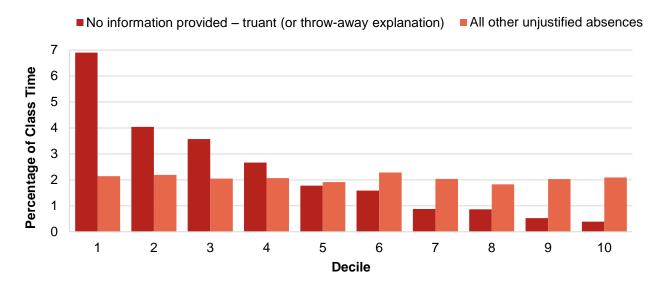
Figure 20: Time Absent from Class for Unjustified Reasons by Decile, Term 2 2017

Decile 1 had the least recorded illness

Decile 1 schools had the least amount of recorded absence for medical reasons (Figure 21). However, these schools had the most recorded truancy and the highest level of absence overall. It is possible that students at these schools experience as much or more illness than those in decile 2-3 schools. One possible explanation is that schools are not following up on why students are absent, in which case the reason is coded as truant by default.

The percentage of class time missed due to illness was similar across deciles 2-7, and lower in deciles 8-10. This is likely to be a better reflection of actual levels of illness among these students.
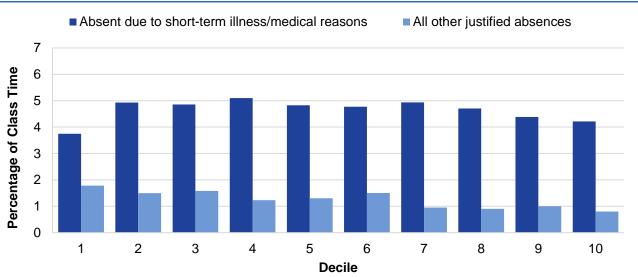
Figure 21: Time Absent from Class for Justified Reasons by Decile, Term 2 2017

Appendix

Data Collection

All state, state-integrated and partnership schools were invited to submit Term 2 attendance data. Of 2,413 schools, 1,920 (80%) provided this data. This accounts for about 640,000 students, or 84% of the student population.

The source data includes a record for every student at the school, with their attendance for every class of every school day in Term 2. This information is taken from the school's student management system (SMS). Data has been collected in this form since 2011.

In 2017, Term 2 began on Monday, 1 May and ended on Friday, 7 July. See the school terms and holidays archive for earlier term dates.

Definitions of Attendance

Attending, or being **present**, means the student was either in class, at a school-organised outing, or at an appointment in or out of school.

Justified absences are absences with explanations that have been deemed by the school to be satisfactory.

Unjustified absences are absences with explanations that have been deemed by the school to be unsatisfactory. School principals are required to make a judgement as to which explanations they will accept, based on school policy.

Exam leave is unsupervised study time given to students to prepare for assessments. This time is not included in the calculation of attendance and absence rates.

The Attendance Code List details how schools should record a student's attendance depending on the situation.

Time and half-days

Class time is measured in minutes. A half-day is 120 minutes of accumulated time – not necessarily a morning or afternoon. Each student can have up to two half-days in one calendar day.

Half-days are classified as either present, justified absence, unjustified absence, or exam leave, depending on the amount of class time recorded in each category.

Measures

The **percentage of half-days attended** is the number of half-days for which the student was present, as a percentage of the total number of half-days for which the student was enrolled (excluding exam leave).

A student is **attending regularly** if they attended more than 90% of all half-days for which they were enrolled.

The **percentage of class time absent** is the length of time (in minutes) for which students were absent, as a percentage of the total time for which students were enrolled. This is further broken

down into justified and unjustified absence, and individual reasons for absence within these categories.

Caveats

- This data covers only Term 2 of each year and may not be representative of the year as a whole.
- The percentage of half-days attended is only calculated for students who were enrolled for at least 30 half-days during Term 2.
- Students who changed schools during Term 2 are counted once for each school at which they were enrolled for at least 30 half-days.
- When a student has been unenrolled during the term but stopped attending before being unenrolled, any unjustified absence records after their last attendance are removed to avoid overestimating truancy.
- Alternative education students and students attending teen parent units are excluded from this report.
- Students attending private schools are not included in this report.
- Partnership schools are not included in analysis by school decile.

Attendance and Achievement Data Considerations

The students included in the attendance and achievement analysis are a cohort of Year 6 students in 2011, whose attendance can be tracked until they were in Year 11 in 2016. Their achievement in Year 11 was compared with their attendance in the last two years, to identify a relationship between attendance and achievement.

Students may move between schools over time, and not all schools submit Term 2 attendance data, so some students are not in the data in some years. This means the cohort of students able to be found in both 2015 and 2016 is approximately 31,000 students.

The model used to analyse this data accounts for the effect of ethnicity, gender, and school decile (as at Year 6, and Year 11) on achievement, as well as the fact that students attending the same school are likely to be similar in nature. The effect of student type (eg. domestic or international students), when included with other effects, was not found to be significant, and so was not included in the model.

Interpretations of this data should be made with caution. While attendance and achievement are positively related, and students that attend school more often usually have higher achievement, this does not imply that students that attend school more often achieve better results because of their higher attendance. Some of this increase may be explained by unmeasured factors that predict both attendance and attainment (eg. motivation).

We **shape** an **education** system that delivers **equitable** and **excellent outcomes**

He mea **tārai** e mātou te **mātauranga** kia **rangatira** ai, kia **mana taurite** ai ōna **huanga**