



## Value-Added Progress Explained for Year 13

NZ System for NZ Schools

**VA13** measures the value-added progress of NZ students in Year 13. These Year 13 students sat NCEA the previous year (in Year 12) and intend sitting NCEA at the end of Year 13.

## **VA13 - Student Reports**

Student Report tables show how each student progressed in his/her subjects in Year 13. Open the 'Student Reports' tab to see the full list of registered students. Select any student name to see their table of results.

Student Table

For Example: Name: Taylor Student

Taylor's Year 12 prior achievement score (51.8), which is an accumulation of standards, levels and grades, is at the top of the table. How Taylor performed in Year 13 is then compared to other NZ Year 13 students who also achieved the same level of performance in Year 12.

Taylor was full time in Geography, History, Mathematics, Physical Education and Physics. This means he was registered in NCEA for at least 14 credits in each subject.

Taylor performed better than expected in Geography (0.6), History (1.1) and Mathematics (0.5). He was close to keeping pace in Physical Education (-0.1), but his performance in Physics was below expectation (-0.8). Teachers may wish to use this indicator to discuss why Taylor's progress in Physics did not match his good progress in his other subjects.

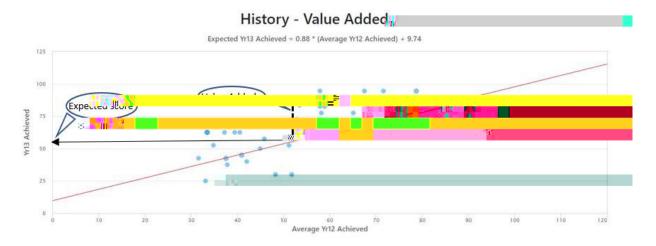
## VA13 - Subject Reports

A subject graph plots the distribution of students and indicates how far a student is from expected performance. Select the 'Subject Reports' tab. Then select the subject.

We will use **History** as an example.

Initially, every NZ student doing a full-time course (14 or more credits) in History is plotted on a scattergram as data points. Year 12 Achievement is on the horizontal axis and Year 13 Achievement is on the vertical axis.

A school sees only their own students as data points scattered around the Year 13 History regression line. On the CAM website, moving the cursor over each data point gives the student's name, Year 12 score and Year 13 History value-added progress score.



To see a student's value-added progress, draw a vertical line from a student data point directly to the regression line. This vertical distance (dotted line) represents the value-added progress score for that student. Extending left to the vertical axis shows the expected score for that student.

This school's History value-added distribution shows exceptionally good results. Most of the students did better than expected, with many significantly better, so the average (Institution Report tab) would show an overall significant positive value-added average for History.

## VA13 – Subject Trends Over Time

Longitudinal trend graphs show value-added averages (data point dots) per subject over a number of years. The background shaded area shows standard error, indicating whether the average in any year is significant (beyond chance) or not. More students in a class will depict a narrow background while fewer students in a class show a wider background.

The History graph example shows consistent improvement from 2012 to 2016, significantly low progress in 2017, then dramatic improvement resulting in significant progress in 2018 and 2019.

For further information about the VA12 or VA13 projects, please contact CAM (Centre for Assessment and Monitoring). Email: <a href="mailto:cam@canterbury.ac.nz">cam@canterbury.ac.nz</a>

