Above: Key Stage 4 Homepage

Above: Change button - The Select Series/Cohort option

Above: The Help Tab options

Above: The Subject Tools (under the Home tab)

Above: The Filter controls

Getting Started

You can Login to 4Matrix with the login details you have been given. If you are not prompted to login to 4Matrix this means that your system has been setup with Active Directory to use your Windows Login.

The **Homepage** provides an overview of the default series of data. The 4Matrix administrator can import multiple series of data for any cohort, e.g. 2019/2020, Year 11. You can see the available series by clicking the **Selected Series** button in the bottom status bar.

Exploring the Ribbon

The **File, Home, Reports** and **Help** tabs are always visible.

The tools in the ribbon will relate to the key stage that you're working with and are divided into categories.

- CDA (KS3) is comprised of over 10 tools
- Key stage 4 (GCSE) includes over 30 tools
- Key Stage 5 (Y12/Y13) contains over 15 tools

Don't be afraid to click on the tables, charts, pupils etc. Data can't be edited or deleted without Admin access, except in the Group Manager or Subject Comments tool, which are covered later in this mini guide.

Exploring a Subject

We can use the group of tools in the ribbon relating to a **Subject** to explore how well subjects compare, how well teaching groups do, and investigate factors which can influence performance.

All subjects can be reviewed using tools such as **Subject Summary** and **Grade Breakdown**.
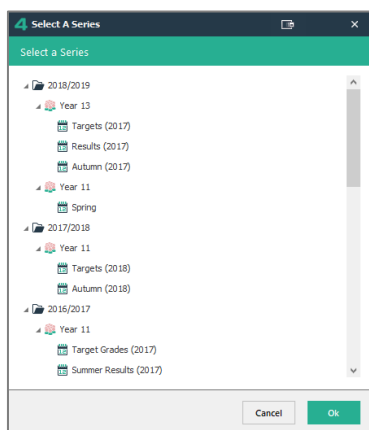Individual subjects can be viewed in **Subject VA**, **Subject Overview**, **Series Comparison**, **Subject Tracking** and **Transition Matrices**.

Most tools allow for a comparative data series to be activated for monitoring performance over time and include Above, On and Below indicators.
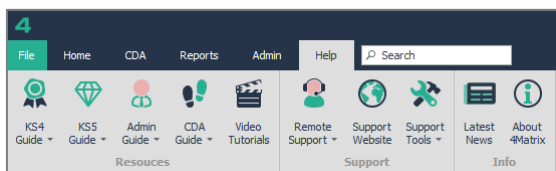
Group and Pupil Filtering

This powerful control can be used to filter by **class**, and **pupil contextual data** e.g., Gender, Pupil premium status.
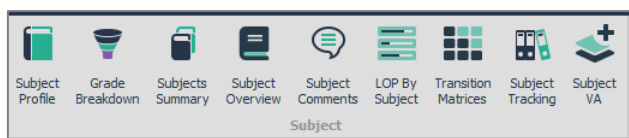
Use the dropdown menu to select the **filter type**: Class, Form, Ethnicity, Research or Advanced. These categories are all self-explanatory except for **Advanced** – this option allows the user to **apply multiple filters** at the same time, for example, all male pupils in class 11MA4 with a Pupil Premium Status of True.
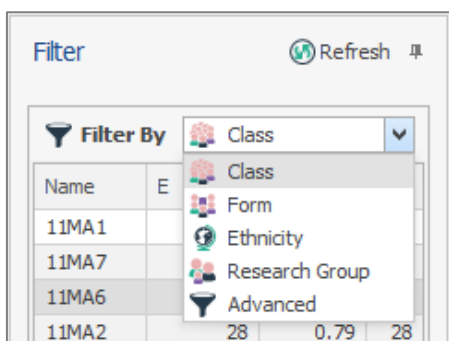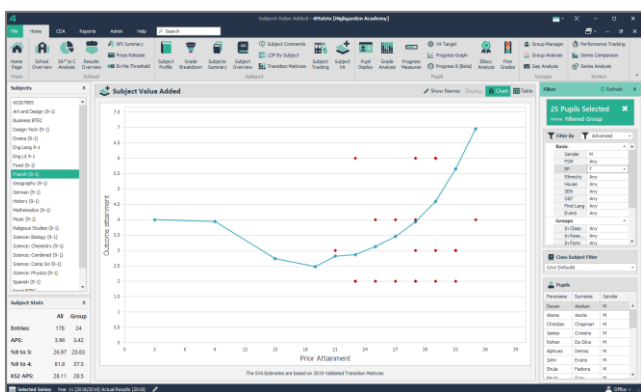
Above: Subject Overview

Above: Subject Overview Comparisons

Above: Subject VA

Above: Subject VA Table View
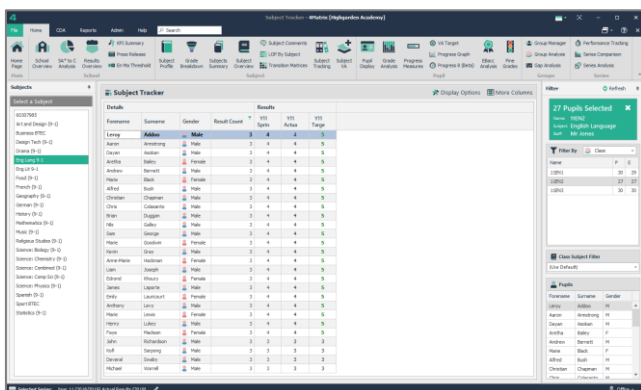
Above: Subject Tracking

Subject Overview

This tool shows the performance of **key groups of pupils/classes** in each subject under the headings of Entries, Subject Residual, Grade Performance, Progress 8 and Attainment and Subject Value Added. It is designed to investigate the extent of **'gaps'** between key groups and their converse, i.e. Males and Females, Pupil Premium and non-Pupil Premium, as well as the option to compare to the whole cohorts headline results in the subject.

The **Rows** panel allows us to select the key groups which we would like to display. 4Matrix Admin users can create **custom groups** and comparison rows. Rows can be expanded by clicking on the '+' to show student level data.

This tool can also be used with a Target grade series to compare whole cohort and key group performance in terms of students **Above**, **On** or **Below** their target grade.

Users can **bulk-export** this information to Excel for further processing and reporting, via the **File menu**.

Subject VA

The **4Matrix SVA** tool presents a chart which plots student performance against the national average outcome per subject, by key stage 2 prior attainment. The data is also available in a **Table View**.

Subjects Summary and Subject Overview also report on SVA performance. A summary SVA score is provided for each key group, class and student in the Subject Overview tool.

A **positive SVA** score signifies that the student (or class/group/subject) have performed above the national average (leading to positive Value Added).
A **negative SVA** score signifies that they have performed below the national average (leading to negative Value Added).

SVA is reported in points, which for 9-1 GCSE subjects can also be interpreted as grades. For example, an SVA score of +0.25 in GCSE Physics indicates that students in this subject are, on average, attaining a quarter of a grade higher than students nationally with the same prior attainment as them.

Subject Tracking

The **Subject Tracking tool** will show changes between each series of data collected, compared directly with the column to the left;
Green = Grade improved
Black = Grade stayed the same
Red = Grade decreased

Cont./

Above: Subject Comments

Above: The Subject Profile tool

Above: Auto-generated comments in Subject Profile

Above: Class residuals in the Filter control

We can select the series we wish to be visible using the **Display Options** tool. The order in which the series are shown is set by the **Edit Series > Termly Position** tool used by the administrator. A report for the selected subject may be printed out from the **File menu**.

The **More Columns** option allows us to include more data columns by dragging and dropping options onto the table.

Subject Comments

This tool allows a **subject leader to comment** on each data series for their subject. 4Matrix produces an **automated commentary** under the headings Entry, Subject Residual, Grade Performance, Gender, Distribution, Progress 8 and Attainment. The coloured dots show the quartile ranking of each parameter compared with other subjects in the school. A subject leader can **type a summary comment** at the top **plus individual comments** in the **Custom box** for each of the categories. The **File menu** contains print options.

Subject Profile

Click the **Video** icon to view a short video which explains the green line. It is made up of the average grade for all students in the cohort, arranged from highest attaining to lowest (left to right). This line effectively draws a line representing *average attainment* right through the ability range for this cohort. It forms a reference point from which students' progress across their subjects can be compared.

The actual dots are the grades attained (or forecast) in students' subjects chosen from the right **Subjects** menu. The distribution of dots about their average allows us to compare differences in performance across subjects.
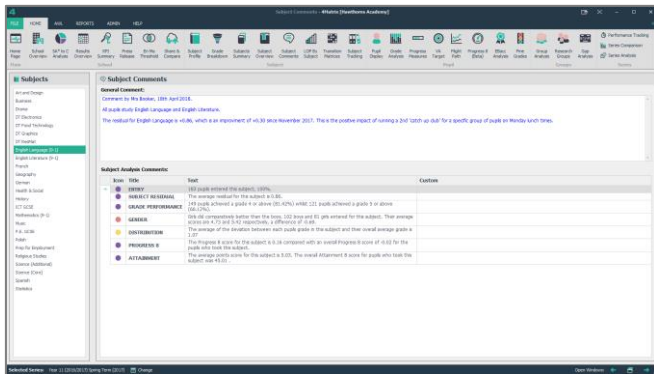
Where dots are clustered together, they indicate a **teaching effect**. Where they are on their own, they indicate a **student effect**. This example (top, left) indicates highly effective teaching because the dots are mostly well above the average line - giving a residual of +0.47, i.e. students are achieving about half a grade more than their average grade in this subject.

Click the **Comments** icon to see automatically generated commentaries for any selected subject.
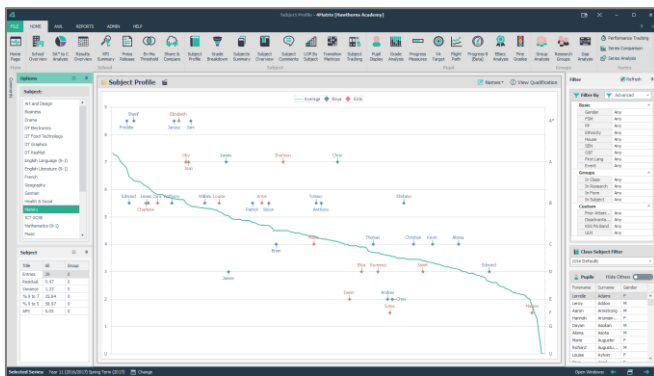
Comparing Teaching Groups

In the **Subject Profile** tool, we can use the **Groups** filters on the right-hand side to filter the information.

If we choose **Filter By: Class** we should be able to see the specialist classes for the chosen subject, ranked in order of subject residual.
This information can support research into the relative impact of teaching when comparing classes with a similar ability profile.

Above: Grade Breakdown

Above: Transition Matrices
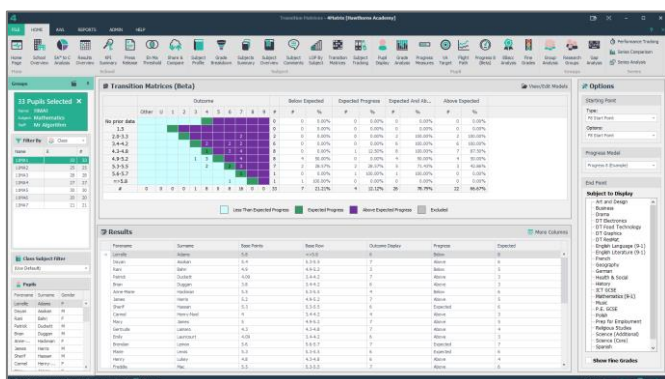

Above: Group Manager tool

Above: Series Comparison

Grade Breakdown

The **Grade Breakdown** tool shows a breakdown of the grades for each subject. There are options to choose awards with letter grades, with number grades, or other formats. The grades can be displayed as numbers or percentages, and all information can be exported into Excel from the **File** menu.

Transition Matrices

The **Transition Matrices** tool will display transition matrices for **any subject or group** in any selected series by comparing the KS2 base data for students with their outcome grades.

The **Options** panel is where users will choose their key stage 2 points settings and subject outcome. Teaching staff may wish to confirm with an Admin user which settings need to be applied to their own subject(s) prior to using this tool. The main Transition Matrices groups students into rows according to their key stage 2 baseline and plots them in the cell that corresponds to their outcome. The number and percentage of students in each below/on/above banding is plotted to the right of the Matrices.

Group Manager/Research Groups

This tool is located under the **Groups Manager** section of tools. It's designed to **support useful investigations** into the performance of different groups of students. Here, we can select students with a shared feature, and study them as a **Research Group** across other tools in 4Matrix. For example, we might wish to find out if Summer Born students perform as well as other students in our school.
We might consider any useful investigations that could relate to students studying our subject, by considering contextual issues, or from a knowledge about students' dispositions. Any user can define a group by choosing **Create New** and then **Add Pupils**. Hold CTRL or SHIFT to select multiple students.
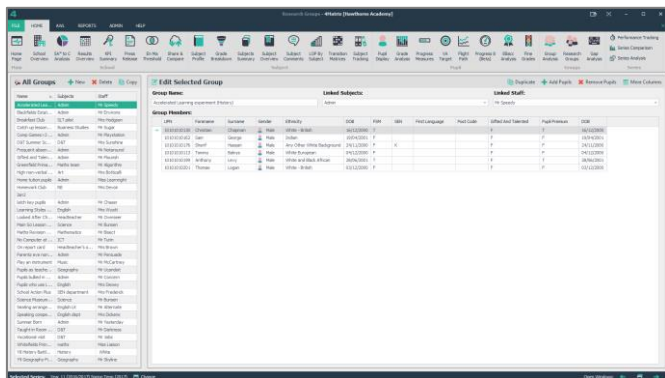
Series Comparison

This tool is found under the **Series** group of tools. It will **compare one data series with another** - usually the current series with a target series, but any 2 series can be compared here. The display will show students who are above, below, or on target. The tabs to the left of the main chart view allow the user to access the data in different ways – as a **Chart, Table** or **Matrix**. The File menu contains a **photo report**.
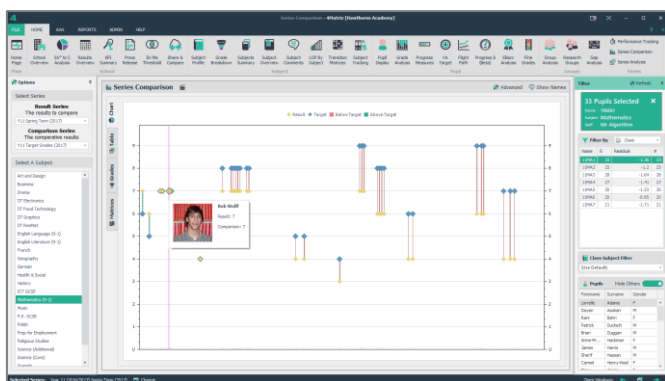
Further Reading and Getting Help

The **Help tab** in 4Matrix contains links to the full application guides, our support portal and News feed.
Website: www.4Matrix.com
Support portal: https://help.4Matrix.com/
Facebook: www.facebook.com/groups/4MatrixData/
Twitter: https://twitter.com/4Matrix