



EDUQ&amp;A

# “Mistakes need to be encouraged and appreciated”

Jim May, lead teacher of mathematics at the John Taylor Free School explains how Mathspace supports his teaching - and students' learning...

## TS How is Mathspace different from other programs that you've used?

**JM** Mathspace's multi-platform approach means it is more accessible and engaging than other programs. Students' work is marked - even during the method stages - and all interactions are available to review from the teacher's dashboard. This in-depth feedback gained from a student's answer set is invaluable. The ability to produce a custom set of questions, tailored to the needs of a class, aids the planning process by adapting the task exactly to my requirements. The options to use the online ebook or printable questions sets are also great facilities.

## What is the most useful feature of Mathspace?

The individual feedback for each student is incredibly detailed, but not overwhelming. Student interaction with individual questions is recorded and includes evidence of corrections, hints, videos and sometimes their stubborn repetition of incorrect solutions! These insights mean that my planning and preparation is now more refined and targeted



for each student, not to mention a lot quicker. This is an excellent tool to assist with differentiation and personalisation of learning.

## Have you noticed a positive impact on student learning since adopting Mathspace?

Undoubtedly. Mathspace has had a great impact on student engagement and heavily influenced the learning that follows on from that. Students are becoming more independent when faced with challenging problems and are at ease when talking through their misunderstandings. They work more collaboratively to address their misconceptions and in turn improve oracy in the subject. Mathspace has not only helped in improving mathematical understanding but also the metacognitive aspects of learning that are so valuable for a student to have - allowing them to follow our school's mantra of 'succeed and thrive'.

## How has Mathspace improved your experience teaching maths?

A quote that impacts my teaching greatly is from David Ausubel. It

reads "The most important single factor influencing learning is what the learner already knows. Ascertain this and teach them accordingly." Mathspace allows me to gain detailed insights into a student's prior understanding and consequently learning can be personalised more effectively. It has drastically reduced my time spent marking and now I am able to focus on effective responses to misconceptions. My students are more reflective and willing to talk about their learning progress accurately because of this.

## What are some ways that teachers can help students engage in maths study?

I feel that mathematical anxiety is a huge factor in disengagement. To combat this I think we need to be able to promote a desire to experiment in mathematics without the fear of making a mistake. Mistakes need to be encouraged and appreciated as a key part of the learning process. Students who are not afraid of an incorrect solution are more willing to engage with mathematics from the off - but will only stay engaged if the mistakes are used to improve their consequent learning.



Find out more at [mathspace.co.uk](https://mathspace.co.uk)