

Live Lessons @ Crestwood Maths

Rationale

To maintain contact with the students and provide regular, supported learning opportunities.

Safeguarding

Teachers present against a plain background – no family photos or personal items on show. They wear headphones if there are other people in the house. No teacher is ever alone in a meeting or lesson. We ensure that there are two or more teachers in the 'room'.

Links are sent for the live lessons just before the lesson starts. The links cannot be accessed after everyone has left the lesson. The lesson links can only be accessed from Crestwood accounts. Visitors from outside the school have to be admitted into the lesson by the lead teacher. All students have their cameras and microphones switched off - they respond using the chat function which is monitored at all times.

Structure

Before we began delivering live online lessons we met to decide a format that would work for teachers and benefit the students.

We use MyMaths and set students weekly tasks to complete, using the feedback function to leave individual comments. We decided that this would continue and that the live lessons would ensure that students had the necessary knowledge to be able to work on the tasks set successfully.

Each lesson has a starter which is on the screen while all the students join. We use starter tasks that they are familiar with.

The main part of the lesson shows the students the Mymaths task and models how to answer the questions. Some lessons extend the learning and others pose problems to solve. The lessons finish by ensuring all students know what they have to do before the next lesson. Students who have not understood are given the opportunity to remain in the lesson to go through additional examples.

Lessons

We see each class twice a week. The first lesson works through all the skills needed in order to be able to complete the MyMaths tasks. The second responds to difficulties - either emailed in by students, mistakes made on Quiz that are set or from looking at results on MyMaths. The second lesson has often been the time when problem solving tasks, hard GCSE questions, puzzles etc have been worked through.

CSAs joined the live lessons and were then able to answer any questions students had about the work in their 1-1 sessions.

For Year 10 higher tier students it became apparent that greater differentiation was needed so the second lesson offers students a choice of lessons to join.

Lesson link A: you understand and what to be challenged further

Lesson Link B: you want to go through the key points again and consolidate.

An example of problem solving. Students were sent the Nrich *Warmsnug Double glazing* task 15 minutes before the lesson. The lesson then began using Jamboard to capture their ideas. The class then worked through the task together. Jamboard enabled them to share their ideas in written form and to add their answers to a table.

Clips from lessons

Theme	Link to lesson
Starter	Mathsbot starter
Language	Picture - what maths can we see PiXI UNlock
Modelling	Blockbusters Using Jamboard
Problem solving	Exam question
Challenge	Using index laws
AfL-5 4 3 2 1	Y10 Quadratics

Resources

We quickly got to grips with the IT (a few practice runs with each other during the Easter break were needed)

Google Meeting is easy to use - especially if you have google classroom - set up a link - post it to the classroom. It is also easy to present ppts, videos, Mathsbot, Mathsbox etc

Deco Boards - these enable us to model worked examples to the students - they are easier to use than a visualiser as you can write over a powerpoint.

Jamboard - free software that enables students to write or comment and present to the class

Things we will take back to class

- More regular AfL checks
- Working more closely with colleagues
- Greater use of whiteboards (using them in the way the Chat function has been used in the google live lessons)
- Ensuring learning objective is referred to at regular intervals during the lesson

Comments from staff

- This has been really good for the quieter pupils in school, as they have been able to contribute more in the chat, than they would in the classroom.
- It has been amazing to see two of our selective mute students engage so well in the chat function, these are both incredibly able students who would never contribute in class. They have begun to make mathematical jokes, contribute and even use jamboard to show their answers.
- Team teaching has been great and given us the opportunity to learn from each other. I was nervous about the tech to start with but soon got to grips with using graphics

boards in lessons. Live modelling for and with students made such a difference to the students and their level of understanding.

- It has made me think harder about my planning, both in terms of the objectives/success criteria driving the lesson and the resources required to practise these skills. I really enjoyed the team teaching, not only to get other ideas on how to teach a topic, which resources to use but also to create a fun and engaging atmosphere for the students.
- I have learnt new ways to use AFL tasks and activities, this has been invaluable throughout online learning as without it the pace and challenge of a lesson would have been way off.
- Teaching from home has made me realise how to get the pupils working more independently and how to provide them resources to use outside of the lesson through the use of the google classroom, something I will be making sure I keep up when back in school.
- There has been a positive ethos in the classroom with pupils realising when they stop to listen and focus on the input their knowledge grows and they understand and can apply concepts better and build their confidence.

Comments from Students

I've really enjoyed the lessons so far and I think that my math teachers have done an amazing job ! They always make the live lessons fun and educational at the same time ! I can't choose a best bit unfortunately because it's just been so amazing and everything about the math live lessons has been great ! I don't think there's anything to improve on with the live lessons and the support and help that my teachers have given is amazing ! I've learnt so much and I hope it stays that way ! **Alex: Year 10**

I really enjoyed the latest lesson, the jamboard was a really fun interactive way to learn rather than just listening. **Julia Year 8**

I felt the maths was good. It was definitely more chilled out than some of the other lessons. It's been very involved, which I think is good for everyone, as, at least for me, I can feel comfortable getting something wrong here. Thanks Miss. **Ethan: Year 9**