



Case study

Gumley House Convent School

Gumley House Convent School FCJ is larger than the average sized comprehensive secondary school with over 1200 students on roll. Almost all are girls; the sixth form has a few boys, including those who attend through sixth form consortia arrangements with two other local Catholic schools. About one third of the students speak English as an additional language.

The school's Mathematics results have steadily improved in the last three years, peaking at 88% A*-C, with a record 39% of the 2015 Year 11 cohort obtaining A/A* grades (up by 7% from 2014). Overall, 92% of the students made expected, or better than expected, progress.

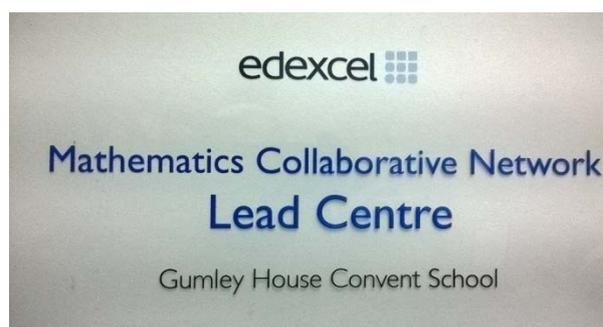
For A-Level, 2015 brought record A2 achievement with 25% of the students obtaining an A* grade for Maths. In addition, two out of the three Further Maths A2 students also obtained A* (one of which scored 100 UMS for all 12 of her Maths and Further Maths Units!)

Gumley House Convent School FCJ is a Mathematics Collaborative Network Hub for Pearson and also a part of the FCJ Education Academy Trust, as well as the TeachSouthEast Partnership, the Leading Edge Partnership and the Association of State Girls' Schools; the school also work closely with schools in Hounslow as well as other Catholic schools in West London.



Mathematics Collaborative Networks

Introduced in May 2013, The Mathematics Collaborative Networks are a free Pearson initiative that sees us working with schools and colleges whose innovative maths teaching practices have shown a direct benefit to their students. These schools and colleges become recognised as ‘hub’ centres and lead a collaborative network in their region. All local schools and colleges are welcome to join the network, which is a combination of face-to-face and online collaboration.



Gumley House Convent School FCJ became a Mathematics Collaborative Hub (originally one of two pilot Hubs) for Pearson in 2013 and since then has led a network of local schools and colleges, providing maths teachers with opportunities to discuss the issues most important to them. For example:

- changes to both GCSE and GCE Maths curriculum and assessment (Edexcel Mathematics team provide the most up-to-date information regarding qualifications reform);
- promoting best practice and innovation by sharing knowledge, expertise and successful teaching approaches;
- improving student progression by sharing and discussing strategies and tools to enhance students’ learning, confidence and progression;
- contributing to developments by taking part in trials and pilots.

‘The session was incredibly helpful I have already started to formulate some targeted intervention for our under-achievers using the helpful resources you shared at the recent hub. We will be also planning to take up the idea of posting home an Easter revision session for key pupils. The resources shared on the neo site saved me an awful lot of time and they are well suited to the intervention we have planned.’
(Danielle, Maths Teacher)

What is the benefit of becoming a Pearson Mathematics Collaborative Hub?

“The present changes for the GCSE (9-1) Maths and impending A Level reforms are perhaps the most radical since Curriculum 2000. Working with Pearson/Edexcel, especially via the hub we host, gives an opportunity to be at the leading edge of these changes right from the start and get the input from the UK’s largest Awarding Body for Mathematics. By having members of the Maths Team visit and deliver gives us the chance to ask questions, and clarify queries, always feeling confident with the response.”
(Pietro)

Leading the department into the future Gumley House Convent School

Pietro Tozzi has been teaching for over 30 years in London comprehensive schools. He has experience as a Head of Department and mentored over 50 ITT trainees and NQTs. Pietro has delivered a variety of courses including GCSE, GCE A-Level (including Further Maths), Key Skills, GNVQ and Functional Skills.



In addition, Pietro is working as a **Maths Credible Specialist for Pearson** supporting teachers by delivering a wide range of training sessions and courses.

Pietro has been nominated for a National Teaching Award.

Pietro, how are you addressing the changes to the curriculum in mathematics in your department?

I think the advice I would give is to start early (or make extra time) to deliver the new curriculum. I showed the department the big picture but have made the changes gradual and try to make them as seamless as possible. We have encouraged lots of peer planning among parallel groups and used CPD and department time to help facilitate. Specimen Papers and materials from other sources have been made available, so colleagues can get an idea of how and to what level the new topics will be tested.

One of the key innovations is that we have obtained licences for all the popular e-learning resources including the Pearson ActiveTeach Series. Students are now allowed to access materials during every maths lesson via their own devices. I firmly believe this is a valuable tool for teaching and learning, which makes my role more of a facilitator than just a teacher.

While preparing for the first assessment of the new GCSE how are you approaching the upcoming choice of tier of entry - Foundation or Higher?

Following careful tracking and analysis of each pupil's prior attainment in both KS2 and KS3 the first cohort to be sitting the GCSE (9-1) have been studying a three-year course. Both formative assessments (after each major topic area) and baseline tests have been sat to assess progress.

FFT Aspire has been most useful in establishing the expected 1-9 grades and will be used to inform final Tier entries along with our own assessments. We have decided that our current Set 3s (out of 4 half-year groups) will be following the reformed Foundation Course, meaning that 37% of the year group will be entered potentially for the lower tier (compared to 17% of the current Year 11s).

Interestingly, FFT Aspire predicts that 87% of the first cohort to sit the new GCSE will obtain a Grade 4 or higher, which matches our current achievement.

How are you developing problem solving skills in the classroom?

We have been embedding problem-solving into our curriculum for many years, even before the last GCSE change in 2010. In fact we changed to a 3 year GCSE before the current reforms in order to make time for deeper learning and build in problem-solving workshops after teaching each topic area (and just before the Formative Assessments) Prior to that we used to deliver the whole curriculum in Year 7 as half termly Themed Projects. The new Pearson textbooks have many useful problems to provide the level of application needed to prepare students well. Also the Edexcel Gold, Silver & Bronze papers make excellent ready-made differentiation activities, and save hours of preparation.

How do you value the support from Edexcel?

In a word, UNRIVALLED! Historically we have always worked with this awarding body for a number of reasons. Although the various qualifications have changed so often in the last 15-20 years, Edexcel has always been on the 'side of the teacher' and offered consistent support, as well as always being the first awarding body to provide services like the Maths Emporium, ResultsPlus & ExamWizard.

This new GCSE has already been supported via early Specifications (to aid advanced planning for the Department), Specimen and Practice Papers and other useful documents (sometimes sharing items sent in by other teachers)

The ongoing communication, via the Emporium email service is the key feature as far as I am concerned. Any questions or requests are answered by people who clearly know what they are doing and often the reply is within minutes of pushing the 'send' button!

All the support is there in a single package when we need it!

Maths Credible Specialist

Pietro Tozzi has been working as a Maths Credible Specialist for Pearson for a while now and he has been working with teachers and maths departments in a number of ways such as: providing advice on delivery models for the new qualifications (KS3/4/5); looking at developing varied teaching & learning methods; advising and supporting with pupil tracking and target setting; delivering CPD sessions and INSET Days (customised for the centre's needs).

"I am happy to share resources and intervention materials which we successfully use in our department. Teachers can arrange to visit Gumley and see some of my approaches and resources in practice or I can deliver a training session in interested centre." (Pietro)

Pietro's session was, as always, informative, engaging and linked the practicalities of delivering new topics with the over-arching changes at a system level. We would gladly book him again!
(Mark, ARK Academies)