

ETWINNING / ERASMUS+ KEY ACTION 2 PROJECT

MY WORLD MY CLASSROOM

**SPICING UP STATISTICS WITH ETWINNING...
THEN ERASMUS+**

DOES THE MERE MENTION OF PROBABILITY FILL YOUR STUDENTS WITH DREAD? ...WHAT ABOUT MEANS, MEDIANS AND HISTOGRAMS?



Image © British Council

“Talk to any maths teacher and they’ll tell you that statistics is a very dry subject; students can’t deal with it because they just don’t feel inspired.” Ian Kell, maths teacher and international coordinator at the Academy at Shotton Hall, Peterlee, explains how working through eTwinning has helped make the topic of statistics more relevant for his students, and given them the tools and space for their curiosity to flourish.

In a bid to breathe new life into the topic, the Academy at Shotton Hall and its partner schools in Georgia, Belgium, Ukraine and Serbia took part in the [eTwinning](#) maths project ‘**My world, my classroom.**’

The initial idea for the project came to Ian one Friday afternoon when he had the rather daunting task of keeping his Year 9 students focused on the subject of ratios. However, he noticed that their interest was immediately piqued when he asked them to work out the proportion of people in the world who spoke English.

This prompted Ian and his partners to put their heads together to come up with a project framework where their mission would be to improve the teaching and learning of maths in their schools and boost students’ motivation in the subject, as well as foster a sense of European identity and genuine curiosity towards one another’s languages and cultures.

Making statistics more relevant and engaging for young learners

“Each partner represented the demographics of their towns and countries. For example, if each country was a class of thirty students we would, using the proportions in the world, explore how many of the class would be hungry, what languages would be spoken, how many would be in poverty, how many would be able to read, be able to have clean water and how many would be rich”, Ian explained.

Over the course of the project, students took turns to submit maths challenges to each other through the project’s secure online platform, known as the eTwinning [TwinSpace](#), all of which required them to follow real life data handling tasks. Once they had the statistic for each country,

students then identified the best way to present their results, such as through animated cartoons, PowerPoint presentations and online magazines:

“The main thing for students is that they could see the point of what they were doing because there was a clear end product, which made the learning easier”, Ian affirmed. “They started to recognise that this was something they would use in their everyday lives and, all of a sudden, they realised that they’d almost been tricked into liking maths!”

As well as improving students’ overall grasp of statistics, the project’s collaborative nature showed them that maths could also be fun and relevant, which gave Ian’s students a real confidence boost:

“Part of our work as teachers is making sure that we have confident students who actually believe they’ve got the ability to go on to study maths. To make maths accessible, so that students can see the reason why they’re doing it, is a key factor in encouraging them to continue studying maths beyond GCSE”, Ian explained.

Meeting curriculum objectives and strengthening digital skills

As a cross curricular project, ‘My world, my classroom’ gave students the chance to hone their skills and meet curriculum objectives not only in maths, but in history, geography and ICT:

“The whole eTwinning platform is digital, which helped students to improve and develop their digital skills, such as by trying new pieces of software and using Skype. For a lot of people Skype is commonplace, but there’s no need for Skype if you’re from Peterlee and everyone around you is from Peterlee”, said Ian.

The project involved inter school collaboration and Ian worked closely with the ICT department to ensure that students used their ICT lessons to research the different digital tools they could use to present their investigation results, from video animations and graphs to an online magazine and project website. Having an audience of peers for their work, students shared with presentations with their partners via the TwinSpace and video conferencing.

“We had a fantastic relationship with the ICT department and the students loved playing around with all the different packages without the threat or idea of an exam at the end of it all – it was just quite nice to play around and see what they could actually do!” Ian reflected.

A melting pot of teaching methodologies

Although maths and statistics were the foundations for this project, a desire to encourage curiosity and cultural awareness amongst students lies at the very heart of it:

“My students absolutely loved the collaboration with their partner schools”, said Ian, “at first they were a bit nervous but then they got into the swing of it and realised that these kids were just kids and that they had this opportunity to exchange ideas. So, in the end, the project not only improved their maths, citizenship and life skills, it also increased their ambitions and their expectations of where they’re going to go beyond school.”

Students greatly enjoyed the autonomy and the opportunity they had to shape their own learning through the project, such as by having free rein to set maths challenges for one another, which ultimately made them feel they had real ownership of the project:

“The collaboration has allowed students’ curiosity to flourish and given them the confidence to do things that perhaps otherwise they wouldn’t do, and it has generated genuine excitement and interest”, Ian said.

Teacher motivation, melting pots and methodologies

While the impact international projects such as these have for students are clear, there are also tremendous benefits for the schools and teachers themselves:

“It makes my job a joy”, explained Ian. “I wake up in the morning not feeling the need to pull the duvet over my head and sob about how I’ve got to go to work, and the international element is part of the love of going to work. I feel that *I’m learning* as there are so many teaching methodologies out there that I would never otherwise encounter, so having access to an international project like this is like opening the door to a massive range of influences, a massive melting pot of ideas.”

Since participating in eTwinning, the Academy at Shotton Hall has successfully secured substantial funding through [Erasmus+](#) for a Key Action 2 project entitled ‘Smart Maths’. The project aims to build digital competency through the use of ICT and develop analytic mathematical thinking through problem solving. As well as giving students more tools and opportunities to travel (a field trip to Pompeii and visit to an observatory in Croatia are already on the cards) communication with their partners abroad will improve students’ linguistic ability.

“Working on eTwinning supported our Erasmus+ application by giving us a good portfolio of projects”, Ian explained. “It also meant that we all shared information, for example on different teaching methodologies, and were able to learn from one another through our partnerships.”

The school hopes that, through this funding, that students will also develop a sense of entrepreneurship through solving problems which require initiative and innovative thinking:

“For about 150 years Peterlee has been an inward looking area”, Ian explained. “If we want to give our students the opportunity to guide the 21st century, they can’t be inward looking: they need to look out. All of these projects are designed with the sole purpose of giving our young people the chance to see the world in a larger, less closed way, in order to be able to respond to the needs of the 21st century.”