

UK teacher developed teaching materials for Elementary Mathematics

Kalayaan Elementary School

On the 25th January Springboard volunteer Emily Hobbs, a Mathematics teacher from Scotland, started a three week project to improve the Mathematics teaching in Kalayaan Elementary School in Merville.

Her first week was spent meeting the staff at Kalayaan Elementary School, observing lessons and planning what to do to help. Although she observed some excellent teaching practices and was impressed with the school she felt there were many aspects of the lessons that could be improved.



Students are generally given very short simple questions during lessons and given very little time to respond to them. In some of the lessons the students simply memorized sentences and formulae and there did not seem to be any questions raised by the students. The lessons all followed the same strict pattern, with almost no variation from class to class. Singing was an integral part of each lesson but some of the songs reinforced the stigma that mathematics is difficult and something that you have to get through and none were used to help remember key facts. The teachers work very hard to prepare great resources for each lesson and write out very detailed lessons plans but do not seem to mark any of the students work; homework assignments are very short multiple choice questions and the answers are read out at the start of the next lesson

After observing classes and working with a small group of students Emily spent her time creating a set of resources for the mathematics teachers in Grade 5 and Grade 6 to use. She split the resources into four key areas that she hoped would address some of the above issues:

Investigative group work – questions with no immediate correct answer but designed to make the students think about and explore different mathematical concepts

Puzzle of the week – Give a question – and leave it up on the classroom wall - that students are not able to answer immediately and give them a time to think about it before sharing answers a week later

Mathematical games – Games that have educational benefit but involve the students and make the lessons more varied

Educational songs – Songs that teach or reinforce some mathematical concept

She gave each teacher an individual copy of the whole set of resources and also a CD as a soft copy and then had a session with the teachers of each grade during her last week to show them what she had created and to go through the different ideas with them. This involved giving them puzzles to try themselves and explaining how different resources could be used with the students and emphasising the use of problem solving.

After a request from the Grade 5 teachers, Emily taught a class of students a lesson on the last Friday of her three weeks with the school incorporating all of the ideas above. The five Grade 5 teachers observed the lesson and she hopes that it gave them some ideas for future use.



The teachers at Kalayaan were very grateful for the time Emily spent with them and the students enjoyed their one off lesson. Springboard is sure that they will put the resources that Emily created to good use.

Like many of the other subjects Mathematics has received very low test results in the National Achievement Test, where less than 60% of students receive a passing grade. This has been a pilot project and Springboard will keep reviewing this programme to see if some adjustments need to be made. We hope to make this amazing project available to other Elementary Schools.