



## RESEARCH TRIP TO FINLAND and THE NETHERLANDS APRIL 2013

### AIM OF THE PROJECT

*Investigate and explore pedagogical approaches in other European countries and the lessons for teaching and learning at Maryland.*

Finland was top of the PISA (Programme for International Student Assessment) for having the best performance in Maths in Europe. The Netherlands was second in Europe and 11<sup>th</sup> internationally. England is 16<sup>th</sup> in Europe and 29<sup>th</sup> internationally out of 65 countries.

### CONTEXT

The Head and DHT of Maryland visited schools near Helsinki in Finland and Amsterdam in the Netherlands with the support of the Education Departments in both countries.

Comparing the two European countries with our context was difficult because there were so many differences, for instance:

- children start school 2 years later than the UK so difficult to compare primary attainment
- different approach to inclusion (EAL pupils and less able pupils are often taught separately)
- less pressure on Primary teachers (less marking of books, no Ofsted, not data driven)
- textbooks are heavily used with accompanying workbooks which is often frowned upon in many UK primary schools
- usually smaller class numbers

### CONCLUSION

- We have good reason to believe that if there were international tests for 11 year olds (PISA tests at 16 years) pupils in England would outperform many of the European countries at the top of the PISA league table. Our pupils are ahead in overall maths attainment at 11 years old, albeit some basic arithmetic is not securely embedded.
- National attainment of 11 year olds in maths in 2012 Level 4+ was actually higher than the Dutch. We believe that our more able children are achieving higher than those two countries, as their knowledge is at a higher level at this age, as our curriculum demands. For instance our primary pupils handle algebra and calculations with decimals well but this is not taught until 12-13 years in Finland.
- Where our European neighbours really succeed is sustaining maths attainment through secondary school. Attainment drops off noticeably in secondary schools in England (data from Dfe in 2012 – only 53% achieved 5+ GCSE A\*-C).

### OUTCOMES FOR OUR SCHOOL

- In Finland and the Netherlands, 'arithmetic is the hero'. The children are truly secure with mental maths and the 4 rules of arithmetic from an early age so we decided to improve the way we teach it at Maryland.

#### So what did we do?

The DHT, Lorraine Cooper, has written and **published a support book** for children to practice mental maths. The book, "Mental Maths 5 a Day", is suitable for parents and teachers. Every family at Maryland is given a complimentary copy of the book and trained how to use it. Many schools, locally and around the country, are now using Mental Maths 5 a Day.

**We changed the way we teach arithmetic**, ensuring the children are secure in ONE method. This has paid off with Y6 pupils (2015 assessments) being highly proficient with calculations with the absence of calculators.

