

## Being Ambitions Professional Learning by Deb Clapham (Primary EAL)

## Numicon course for Early Years & Primary Teachers at Bangkok Patana School, Bangkok on 7<sup>th</sup> November 2015

Numbers should be our best friends but unfortunately, for some children and even adults, they are not. This could mainly be because they have missed out on using Numicon, a mathematics "hands-on" resource, enabling students to understand concrete and pictorial to abstract mathematical concepts.

Recently, I was very fortunate to attend a Numicon professional development course led by Liz Gibbs, a Numicon instructor and to learn how Numicon is beneficial to all pupils in Primary, and even students in Secondary.

Mathematics is all about patterns and Numicon is designed in a way that allows children to recognise patterns quickly and easily. The visual "stair case" image when the Numicon pieces are placed from zero to ten reinforces pattern spotting and a proportional view of what each numeral is worth. Numicon is designed in a way that the pieces can be easily put together, whether the activity is to make ten, to add decimals or find n.

Numicon can be used to illustrate various mathematical vocabulary to learners who have English as an additional language. Numicon shapes could be placed in weighing scales to find greater than, fewer than or the equivalence. Stacking Numicon pieces on top of each other with pegs creates a proportional image of what a multiplication calculation looks like and using a Numicon number line to divide using the grouping method reinforces the underlining meaning of division. The Numicon shapes could also be used with a peg board enabling students to discover fractions within images, i.e. what proportion of the image is coloured blue? Or developing a greater understanding of rotational symmetry by using four peg boards.

As teachers, we should continue to use a variety of mathematical resources, not just Numicon, to ensure our students have concrete and pictorial mathematical understanding, which then enables them to comprehend abstract calculations, ensuring they strive to become top mathematicians.

Do you have any professional development news you want to share?

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