

Hooked on Mathematics by Jenni Back – Book Review by Katherine Milner

This book details Jenni's long term collaboration with a Brighton primary school. The premise of the six year long project, outlined in the introduction, was to use quality free resources to develop a Key Stage 2 school curriculum to both motivate children and allow them opportunities to engage with the aims of the National Curriculum. Throughout the book, it is refreshing to see a challenge to the common belief that children need to work on fluency prior to being able to reason and problem solve. Instead, the approach advocated here is that each module begins with a 'hook' – an interesting problem, scenario, game or book that might require the children to use their mathematical fluency. These are varied and aim to be memorable for the children which creating a human pie chart would certainly be! Other, more explicit opportunities to develop fact recall are provided later within the teaching sequence.

The book is divided into 11 chapters, each focusing on a different aspect of the mathematics curriculum, referred to as modules. Each chapter follows the same format, describing the approach used. In addition to the initial 'hook', children are involved in creating a mind map, developing their content knowledge, application tasks and assessment and producing a memory jogger as well as other hooks interweaved throughout the module. An example of an application task was the children returning to a game played at the start of the module in order to identify winning strategies.

The use of real-life contexts are illustrated throughout the book. For example, in the measurement, money and time module, children had an opportunity to engage with a local business, such as a café or charity shop and to develop a linked enterprise in school. Many of the activities and games are from NRich and therefore may be familiar, however, suggestions are made as to how these might be adapted, for example, further developing the ideas in the activity 'Stringy Quads' to focus on 3D shapes using jelly sweets and cocktail sticks!

Reference is made to a number of other free resources such as those offered by the NCETM and the CIMT in their primary Mathematics Enhancement Programme, however, there is also reference to some resources, such as BEAM's Big Book of Word Problems which do have a cost. When resources are referenced, it is really useful to see the relevant pages from them included in the book to save time finding them elsewhere.

The book contains many words of advice from Jenni that she and the teachers developed over the course of the project, such as constantly referring to the time throughout the day rather than it being a separate area of the curriculum to be taught and the mantra they used in the FDRP module that 'a fraction is always a fraction of something'. The introductory pages outline some of the bigger decisions made when embarking on this change, such as all year groups working on the same concept at broadly the same time to allow the teachers to engage in professional dialogue and development.

If you are considering adapting your mathematics curriculum to include some of the ideas mentioned here, this book provides a really useful starting point. The format of the book allows you to choose a particular module and give it a try!