**BSRLM Early Years and Primary Mathematics (EYPM) Working Group**

**Minutes of the 8th Meeting**

**Venue**: University of Cambridge

**Date**: 7th March 2020

**Time**: 3.30pm

**Convenors**: Sue Gifford, Rachel Marks, Gwen Ineson

**Scribe**: Gwen Ineson

**In attendance:**

## Sue Gifford (University of Roehampton); Rachel Marks (University of Brighton); Gwen Ineson (Brunel University); Pablo Mayorga (University of Roehampton); Michael Rumbelow (Bristol University); Alison Parish; Priya Shah; Joel Kelly (The Blue School, London); Judy Sayers (University of Leeds); Yiannis Pascalis (Brunel University); Ozdemir Tiflis (Brunel University); Peter Cave (University of Manchester); Joshua Culleton; Nancy Barclay (University of Brighton); Julie Alderton (University of Cambridge); Amanda O-Shea (Northampton University); Alison Borthwick; Amy Porter (University of Roehampton); Lorraine Hartley (University of Roehampton); Jasmina Milinkovic

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**Improving mathematics in the early years and Key Stage One:**

* Hard copies of the EEF document were provided to attendees.
* Two of the authors of the report (Rachel Marks and Nancy Barclay) explained the process of reviewing the literature. Sue Gifford was on the advisory panel and was responsible for leading on the writing of the examples included in the report.
* It was pointed out that this report, unlike the EEF report on Improving mathematics in Key Stages 2 and 3, was geared towards Senior leaders, rather than teachers. Colleagues felt that the EEF had missed an opportunity by framing it in this way as it was not as easy as the previous report had been in taking to teachers to show them what evidence shows helps pupils make progress in mathematics.
* An evidence report is due out at the end of the month. It should be noted that this is not a review of research on children’s learning – the focus is on effective teaching (i.e. because it was based on interventions).
* The team note that there is very little research on effective transition practices, or on how to work with parents to support their children.
* Colleagues noted that problem solving isn’t specifically mentioned - there isn’t a significant body of research in this area. It was suggested that as problem solving is so embedded into mathematical contexts in EYFS and KS1, it may not be viewed as something separate to mathematics in those contexts.
* In Serbia mathematics education is moving in a different direction and does not involve very much problem solving

**Baseline report – testing 4 year olds:**

* [**https://www.gov.uk/government/publications/reception-baseline-assessment-validity-report**](https://www.gov.uk/government/publications/reception-baseline-assessment-validity-report)
* These tests involve one to one assessment which last approximately 20 minutes. Early responses from those involved in the trials are that the tests don’t tell teachers anything that they didn’t already know. [**https://neu.org.uk/dfe-report-baseline**](https://neu.org.uk/dfe-report-baseline)
* In the STA baseline report, they say the shape recognition item *was removed .. to better reflect the early years foundation stage, from which shape is being removed* (p16) This may just be unchecked slippage by STA authors, as of course, it is proposed that shape and space remain in the EYFS educational programme and have just been removed from the assessment Goals.
* In previous meetings we have discussed the issue of the shape and space focus being removed from the early learning goals. Colleagues recognise that although this does not suggest that shape and space should not be taught, in reality, teachers are likely to focus their teaching on what is assessed in the ELGs.

**Research collaboration opportunities**

* A suggestion for future collaboration/discussion is about looking at the effect of introducing formal written methods earlier than in the previous curriculum, on children’s approaches to calculation. Some of us felt that children were drawing on formal written methods without necessarily understanding the approach, and others felt that the focus on written methods had improved children’s understanding of place value. We discussed Alison Borthwick’s research that she carried out with Micky Harcourt-Heath over several years, including since the introduction of the current national curriculum. This was linked to a 1997 paper by Laurie Rousham (see below) about the effect of introducing formal written methods on the calculation choices made by pupils. We thought it might be interesting to revisit this to look at strategy choice after the teaching of formal column methods. If anyone is interested in pursuing these ideas, please get in touch with Gwen (gwen.ineson@brunel.ac.uk).
* Link to one of Alison’s papers: <https://bsrlm.org.uk/wp-content/uploads/2017/03/BSRLM-CP-36-3-03.pdf>
* Rousham, L., (1997), Jumping on an Empty Number Line, Primary Maths and Science Questions, 2, pp. 6-8

**Good practice in the teaching of fractions**

* Sue Gifford invited contributions about research or good practice in the teaching of fractions to support a Nuffield funded project to develop guidance on the teaching of fractions and decimals 3-11, which is a follow up to the Griffiths, Back & Gifford project on manipulatives <https://www.nuffieldfoundation.org/project/teaching-fractions-and-decimals-to-children-aged-3-to-11>
* It was suggested that the group might be used by others to seek support in this way.

**The Wellcome Collection**

* Has a ‘play well ‘exhibition which includes the history of maths resources including Froebel’s gifts – on until 13th April.
* https://wellcomecollection.org/whats-on

**Next time**

* Suggestions for the focus of the next group meeting are welcome!