Everyday maths project: report on focus groups (23.09.2013)

Researchers from the University of Bristol are designing a series of maths workshops for parents of Year 3 and Year 4 children. The aim of the workshops is to help parents think about the way they use maths in everyday life, so they can support their children's learning. To help them plan the workshops, the researchers ran focus groups in 15 schools across Bristol, and 1 inner-city school in Birmingham. They also spoke to parents in playgrounds at the end of the school day. The researchers wanted to know how parents felt about maths, what kind of maths parents and children did outside of school, and the kind of things that would help parents. Here is a summary of what parents said.

- **Maths at home**

Whilst a small number of parents felt that they did not share maths activities with their children, most parents could give some examples of how they supported their children's maths learning in everyday contexts. Common examples involved parents discussing pocket money with children, or taking children shopping and getting them to think about prices, total costs and the amount of change to be expected. Cooking was also discussed lots, and parents described children weighing food and estimating portions. Some parents purchased maths games whilst others made their own games. Other parents replicated the kind of maths that they thought took place in school, and purchased textbooks for children to use, tested children on their times tables and sang songs involving numbers. Parents sometimes tried to instil a respect for money by explaining why children should turn lights off or computers off when they are no longer in use. Even though parents did not show children household bills they did try to teach children about spending money wisely.

Parents talked about maths emerging naturally during children's play, such as counting when sharing out toys or sweets, playing hopscotch, estimating the value of certain things like collectible cards, and keeping score during a game.

- **Parents' ability to help their children with maths homework**

Many parents recognised that the type of maths taught in primary schools today is different to the type of maths taught when they were at school. Some parents had the confidence and resources to learn the way maths is taught today. These parents talked about buying textbooks, browsing the internet, or asking teachers for help. A few parents figured out how to do their children's homework by simply looking at the homework sheet, whilst others managed to "muddle their way through it" with their children. Some children were able to do maths without any help or rarely had homework to do.

However, most of the people who took part in the focus groups expressed concerns because they struggled to understand the modern methods. These concerns were shared by parents who left school with no qualifications as well as parents who went to university. Parents not knowing how to

support their children sometimes resulted in negative emotional experiences during homework time and parents described feeling "lost", "confused" and "left behind". Some talked about feeling upset and getting into heated arguments with children over homework, whilst others preferred to avoid their children during homework time or direct children's questions to other family members. Parents sometimes said that their children failed to comprehend that the "old fashioned" methods were not "wrong", but just different. Children felt "muddled", "annoyed", and "fed up" if their parents taught them the old ways. Some parents paid for extra tuition for themselves and their children.

- **Support from schools**

Some parents were happy with the support they received from schools, particularly if those schools offered maths workshops for parents and if teachers came across as approachable. A small number of parents asked for extra maths homework for their children (if those children were gifted, or required more help to keep up).

However, parents' lack of knowledge about the latest methods in maths was often discussed as a problem arising because of poor home-school communication. Parents wanted guidance from teachers about how to complete homework (this information could be provided on homework sheets), though some wanted input about how to teach and motivate their children to do homework. Parents also wanted to know how often children should be doing homework and for how long. The amount of information parents wanted from schools about what happened during the school day differed. Whilst some wanted to know what was happening in class on a weekly basis, others wanted a breakdown of each day's lessons and activities as well as opportunities to observe lessons. This information was required so parents could "weave" what children were learning at school with home activities. Some schools addressed this need for information by writing information on "communication boards" outside of classrooms. Parents in one school learned from each other during focus group discussions and said that a parents' forum for discussing and sharing ideas would be welcomed in the future.

- **The value of maths**

Parents of all abilities felt maths was important and wanted their children to do well in it. Parents talked about needing maths to get a good job, and how maths permeated everyday life and was needed to get on with life. We interviewed some mums who were worried about passing on what they identified as a stereotyped view that girls are not as good at maths as boys. They tried to appear confident and happy when using maths but admitted that they sometimes struggled to help their children.

The Everyday Maths project researchers are Dr Tim Jay, Dr Jo Rose, and Dr Ben Simmons. They are based at the Graduate School of Education, University of Bristol. The project is funded by the Nuffield Foundation. To keep up to date with project findings you can follow them on Twitter (@Everyday_Maths) and Facebook https://www.facebook.com/everydaymathsbristol").