



Shanghai: Parents' Information Morning

Wednesday, 13th February

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This session will:

- Give an overview of the England – China Shanghai exchange and our involvement with the project.
- Describe the schools and learning environment in Shanghai.
- Discuss why the teaching of maths was so effective in Shanghai.
- Describe the return leg of the Shanghai Exchange in WPPS.
- Discuss some of the potential implications for maths teaching in WPPS.

Background to the exchange.





Overview of trip to Shanghai

- ▶ Monday, 26th Nov – University lectures
- ▶ Tuesday 27th – Friday 30th Nov – Changqing Primary School
- ▶ Sunday 2nd December – Lectures
- ▶ Monday 3rd – Thursday 7th Dec – Pingnan Primary School



The Shanghai Secrets (lecture from Prof Zhang Minxuan)

- 4 traditional factors
- 



8 modern factors

- Open door policy – learning from other countries.
- Mid – long term development plans.
- Increasing education income.
- 3 rounds of curriculum reform since 80s.
- Teachers' career development ladders – motivational for teachers.
- Improvement in conditions of poor schools.
- Tackle low performance schools by empowering management, partnership school groups and good teachers being mobile between schools.
- 30% of best high school enrolment places for top students in low performance state schools.



The Learning Environment: Shanghai schools and classrooms.



The Learning Environment: Shanghai schools and classrooms.



The culture of teaching mathematics in Shanghai.



Maths Teaching



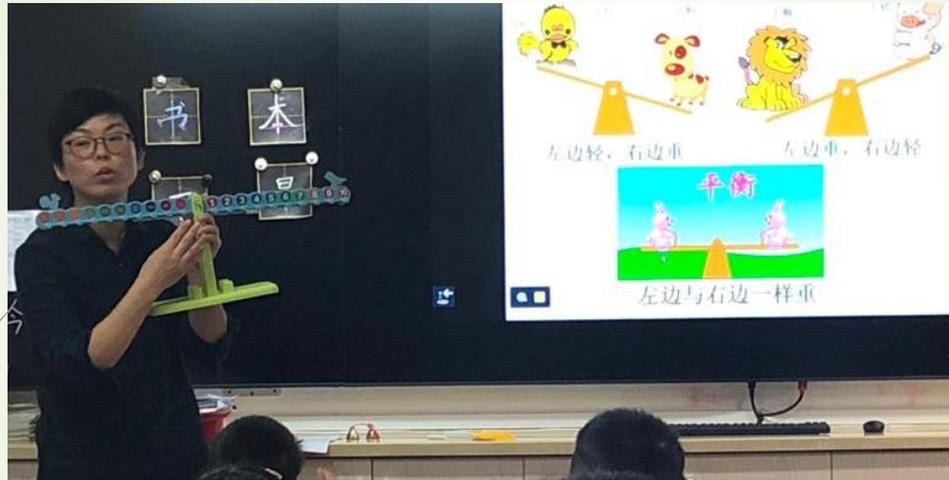
Lesson structure



Concrete and pictorial representation



The Return Leg at Wimbledon Park



Year 2



How many chairs can you see?



1 group of 4 = 1 four



2 groups of 4 = 2 fours

$$4+4=8$$



3 groups of 4 = 3 fours

$$4+4+4=12$$



4 groups of 4 = 4 fours

$$4+4+4+4=16$$

Add up some **same** numbers , we can use **Multiplication** .

6 twos $2+2+2+2+2+2=12$

Sign of multiplication

$$\begin{array}{ccccccc} 6 & \times & 2 & = & 12 \\ \vdots & & \vdots & & \vdots \\ \text{factor} & & \text{factor} & & \text{product} \end{array}$$

Read as: 6 times 2 equals 12

Year 6

$$\frac{1}{10} = 0.1$$

$$\frac{2}{10} = 0.2$$

$$\frac{3}{10} = 0.3$$

$$\frac{4}{10} = 0.4$$

...

$$\frac{1}{100} = 0.01$$

$$\frac{2}{100} = 0.02$$

$$\frac{3}{100} = 0.03$$

$$\frac{4}{100} = 0.04$$

...

$$\frac{1}{1000} = 0.001$$

$$\frac{2}{1000} = 0.002$$

...

$$\frac{32}{1000} = 0.032$$

$$\frac{123}{1000} = 0.123$$

...

fraction \longleftrightarrow decimal

When the denominator is 10, we can write the fraction as a decimal with one decimal place.

$$1/10=0.1 \quad 2/10=0.2 \quad \dots$$

When the denominator is 100, we can write the fraction as a decimal with two decimal places.

$$1/100=0.01 \quad 2/100=0.02 \quad \dots$$

When the denominator is 1000, we can write the fraction as a decimal with three decimal places.

$$1/1000=0.001 \quad 2/1000=0.002 \quad \dots$$

...

0.001



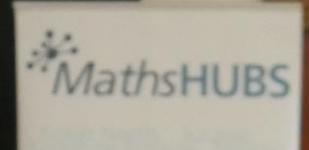
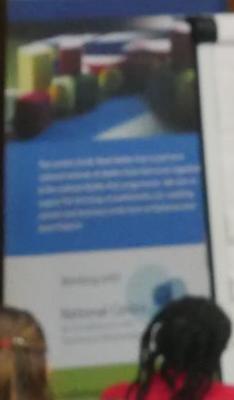
0.01

The Gallery Lessons

example 3

(1) $0.64 \times 1.4 = 0.90$
(rounding the product to the nearest hundredth)

$$\begin{array}{r} 0.64 \\ \times 1.4 \\ \hline 256 \\ 64 \\ \hline 0.896 \\ \text{MP} \\ \hline 0.90 \end{array}$$





Professional development for Wimbledon Park staff.

- Planning time
- Lesson observations
- Q and A staff meeting
- Opportunity to attend gallery lessons



Q&A Session

Q: If a child hasn't understood the concept, how do you catch them up?

Q: What happens with pupils who are working well below expected level?

Q: Comparing WPPS pupils to those you have taught before, are there any areas we should focus on?

Q: What do you do to support mobile children?

Q: What is teaching Maths in Early Years like?



Potential Implications for maths teaching in WPPS

- Increased focus on calculation.
- Making lots of time for repeated practice and timed practice of calculation skills.
- Considering what key skills need to be mastered in each year group and what mastered looks like.
- Increasing professional dialogue among teachers and increasing our peer to peer observation time.



Any Questions?

