

# Ann McDonnell

ALM 23

Is maths *really* special?

# Background

- ▶ PHD title: A longitudinal case study of the experience of schooling and aspirations for education, work and life of pupils in an inner-city secondary school in a 'high-NEET' Local Authority in England
- ▶ Area background: I undertook this research in a London Borough which is categorised as the 7<sup>th</sup> most deprived area in England which has a high incident of young people becoming NEET (Not in Employment, Education or Training)

# Data collection

- ▶ Focus groups
- ▶ Observations of interventions
- ▶ Questionnaires
- ▶ Interviews with teachers and other stake holders

# Focus group composition

- ▶ There were four focus groups:
- ▶ Boys that were identified as high risk of becoming NEET who took part in the school led intervention (BI)
- ▶ Girls that were identified as high risk of becoming NEET who took part in the school led intervention (GI)
- ▶ Boys identified as not at risk of becoming NEET (BNI)
- ▶ Girls identified as not at risk of becoming NEET (GNI)

# Numeracy getting worse?

- ▶ Recent research states that; numeracy levels are getting worse not better in the United Kingdom, that the cost of poor numeracy is felt by individuals, employers and governments, and that 1 in 4 adults do not believe that school maths prepared them for every day maths (National numeracy 2011, 2014).
- ▶ <http://www.nationalnumeracy.org.uk/research-skills-life-survey-2011>
- ▶ <http://www.nationalnumeracy.org.uk/research-pisa-programme-international-student-assessment-2014>

# Young peoples voice

- ▶ The quotes I have handed out are a selection from the young people who participated in the focus groups
- ▶ What do these quotes convey to you?

# My Observations

- ▶ In primary schools I have observed maths lessons taught mainly through practical application
- ▶ In secondary education I have observed very good practical application of mathematical content within maths lessons

However,

- explicit transferability is rarely referred to
- in some elements of the maths curriculum practical applications seem very loosely defined
- when external exams become the focus of maths lessons practical application is far less visible

# Questions to discuss

- ▶ Is Maths *really* special?

Is it possible that by teaching maths in practical ways, especially at lower levels, that a culture has emerged amongst young people that maths must **always** be taught in a practical-everyday way and if it is not it becomes a subject that is for 'someone else' not for me and it has no general transferability .

- ▶ What are or should be the components of a good maths experience at school and how would this contribute to successful adult numeracy?