CATERING TO MATHEMATICALLY GIFTED STUDENTS IN PRIMARY CLASSROOMS

WHO ARE ‘GIFTED’ STUDENTS?

- Everyone?
  All children have relative strengths.
- Who?
  Top 1-2%
  Top 15%

LEVELS OF GIFTEDNESS

- Mildly
- Moderately
- Highly
- Exceptionally
- Profoundly

LEARNING DISABLED AND GIFTED

- Harder to detect with regular testing
- ADHD
- Memory problems
- Dyslexia
- Asperger's
- More
- Very important they are catered for

WHY DIFFERENTIATE?

- Under achievement
- 63% with IQ > 130
- 18-25% drop out of High School (American study)
- Boredom
- Misbehaviour

WHY DIFFERENTIATE?

- Time wasted
  Moderately gifted 50%
- Social isolation
- Emotional frustration
- Stress

HOW TO DIFFERENTIATE

- No single answer – every child is different

HOW TO DIFFERENTIATE

- Pre-test
- Teach what is not known
- Short term groupings

HOW TO DIFFERENTIATE

- Next year's work.
- Must have whole school working together.
- Liaise with High School for year 6 students.
- Consult with a team.
- Could help highly gifted and above.

HOW TO DIFFERENTIATE

- Extra work for ‘top group’
- Problem solving pages (e.g. iMaths)
- Think Tanks
- Differentiated worksheets
- Open ended problems (e.g. paint for school)
- Good for moderately gifted

HOW TO DIFFERENTIATE

- Competitions
- AMC
- ICAS
- Engineering Games
- Chess
- Tournament of the Minds
- Robocup

HOW TO DIFFERENTIATE

- Competitions
- APSMO
- AMT
  Maths Challenge
  Newton
  Dirichlet
  Euler

GROUPINGS

- Selective classes
- Maths Enrichment Group in School
- Working with older students
- Groups across schools

CONCLUSION

- Pre-test to teach what is not known
- Allow students to work with intellectual peers
- Provide challenging material (e.g. AMT)
- Don’t panic if you can’t do it – buy solution books and/or learn together.