



# Newcastle University

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# Schools in Newcastle Cluster

## George Stephenson High School (Humanities College)

- Location: Killingworth, Tyne and Wear (North of Newcastle)
- 11-18 Mixed gender comprehensive school approx. 1000 students. Above average number of students with Special needs and above average number of students on Free School Meals (an index of poverty)
- Above average results in mathematics examinations nationally, and about average in expected progress made by students in mathematics compared to similar schools.
- ‘Closing the gap’ – about 30% difference in expected progress in mathematics between disadvantaged students and others.
- Approximately 10 members of staff in the mathematics department
- About 6 members of staff using Fasmed materials: Y7 – Y10 classes
- Technology – Ipad (teacher uses and shares with students) – Promethean whiteboards – ‘Show me’ App and ‘Reflector’ to mirror Ipad to projector.
- Activities: From MAP materials – Distance/Time; Candy Cartons; Security Cameras; Travelling to School
- Regular timetabled planning and review meetings every 3 weeks for Fasmed
- Teachers filling out reports on activities – visits from Fasmed team to observe.
- Department meeting and classroom activities filmed

# Schools in Newcastle Cluster

## St Thomas More Catholic Academy (previously a specialist mathematics college)

- Location: North Shields (North East of Newcastle)
- 11-18 mixed comprehensive school approx 1600 students. Average number of students with special needs and receiving FSM.
- In the top quintile of mathematics results nationally, but lower than average expected progress made by students in mathematics compared to similar schools.
- ‘Closing the gap’ about 10% difference in expected progress in mathematics between disadvantaged students and others.
- Approximately 15 members of staff in the mathematics department with 4 participating in Fasmed with Y7 – Y10 classes.
- Technology – Ipads distributed to students and using ‘Socrative’ and ‘Classflow’ software – intending to use ‘Reflector’ to mirror Ipads to projector.
- Activities from MAP materials: Distance/Time; Security Cameras; Sense of Scale
- Regular timetabled planning and review meetings about every 3 weeks for Fasmed
- Teachers filling out lesson reports and observations by Fasmed team.

# Schools in Newcastle Cluster

## Park View School (Academy)

- Location: Chester le Street (south of Newcastle)
- 11-18 Mixed comprehensive school with approx. 1400 students. Below average number of students with special needs and FSM.
- Above average results nationally, but in the bottom quintile of results compared to similar schools and average expected progress made by students in mathematics compared to similar schools.
- ‘Closing the gap’: approx. 20% difference in expected progress in mathematics between disadvantaged students and others (who are also making less than expected progress compared to the national average)
- Approximately 10 members of staff in the department and 4 participating in the Fasmed project with Y7 – Y10 classes.
- Technology – Chromebooks, using Googledocs to compile written responses from students.
- Activities from MAP materials: Distance/Time; Consecutive sums; Gold Rush
- Meetings arranged on an ad hoc basis with incidental planning and feedback

# Cluster Meetings with schools (professional development)

## Preliminary cluster meeting at University March 2014

- 3 Schools -
- Introduction to project and information sharing

## Further cluster meeting at University July 2014

- Aligning Fasmed to the new National Curriculum
- Research protocols and information documents discussed
- Use of video – teacher reports – parental permissions

## One day training at Copthorne hotel November 2014

- Progress report
- What is formative assessment?
- Working with MAP materials
- Using Classflow
- Planning next steps

## Cluster meeting at George Stephenson School March 2015 (filmed)

- Sharing experience of 'Time/distance' activity
- School reports on one other activity used
- Linking Fasmed to new GCSE assessment (16+)

# Observations at schools

**In all schools teachers are filling out reports on lessons (variable rate of completion)**

## **George Stephenson**

- Observed 3+ planning and review meetings
- Observed 2+ lessons

## **St Thomas More**

- Observed 3+ planning and review meetings
- Observed 3+ lessons

## **Park View**

- Observed 2+ planning and review meetings
- No lessons observed

## Teachers' feedback

- It takes time – to get used to the materials and to alter the rhythm and pace of learning and teaching
- Finding the requirement to carry out a preliminary assessment before teaching very useful (although time consuming)
- The increased amount of focused discussion peer/peer and teacher/student is valuable
- There is beginning to be a change in the 'learning ethos' and some classes of students are becoming more confident problem solvers
- The topics are accessible and 'grounded'

## Further comments

- The technology adds another layer of complexity, but some benefits are being recognised
  - However, managing the more ambitious elements of the technology is difficult to learn and use in class, so the more elementary applications are used the most.
- Some voices questioning whether all this ‘fuss’ is making a significant impact on learning: ‘Would they have learned as much, more efficiently, if I had taught them in my traditional way?’

# Management meetings

- Strategic Advisory committee
  - June 2014
  - November 2014
- Evaluators' meeting
  - December 2014