

## Oracy and Mathematics

'Although groupwork – a teaching strategy based on learning through social interaction – is used across the curriculum in England, it is under-utilised in maths teaching.' <https://www.cam.ac.uk/research/impact/groupwork-adds-up-to-better-maths-teaching>.

Miss Emma Gregson, Mathematics Coordinator: 'As the Maths subject leader, I was particularly interested in how the development of oracy skills would impact Maths teaching.'

'Elizabeth Cohen's book 'Designing Groupwork' states that to work well collaboratively, children need to develop a variety of skills including: listening; asking questions - making sense of your own understanding; explaining by telling how and why; finding out what others think - asking for, listening to and making sense of their ideas; reflecting on and making use of what has been said; and pulling ideas together - sharing, listening, valuing all contributions.'

BoltonSchoolJnrGirls @BoltonJnrGirls · 21/01/2020  
Year 6 first oracy lesson, linked to some Maths problem solving to find treasure using coordinates. We are working on following discussion guidelines. @voice2toracy #gettalkinginclass – at Bolton school



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BoltonSchoolJnrGirls @BoltonJnrGirls · 14/02/2020  
Year 6 are busy solving a complicated Maths problem: lots of teamwork and discussion skills in action! – at Bolton school



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Oracy skills were taught in Mathematics explicitly over the year and were developed in practical sessions. This resulted in the girls being better able to communicate their ideas in Maths as well as developing team working skills. This was particularly the case when they worked in small groups of three or four to solve in-depth Maths problems (using resources such as those on the Nrich website and Maths Plus Group Works by Peter Clark). The girls enjoyed working collaboratively to discuss, question, reason and problem solve.

BoltonSchoolJnrGirls @BoltonJnrGirls · 27/02/2020  
Vital oracy and mathematical skills developed in Year 5 through back to back drawing- plotting co-ordinates and predicting the reflection @BoltonSchool @voice2toracy



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Using our oracy skills in Maths to solve problems.

[https://app.seesaw.me/pages/shared\\_item?item\\_id=item.668d242b-38a9-475b-ab8e-0ce78eacca92&share\\_token=UEbR-rawQTakci9YBoC1Wg&mode=share](https://app.seesaw.me/pages/shared_item?item_id=item.668d242b-38a9-475b-ab8e-0ce78eacca92&share_token=UEbR-rawQTakci9YBoC1Wg&mode=share)

Problem solving in Maths using our teamwork and discussion skills.

[https://app.seesaw.me/pages/shared\\_item?item\\_id=item.211daa82-6e0e-4cba-a740-d3f1bedacbf8&share\\_token=EVWfzy4Sm6z8U68KP0n0w&mode=share](https://app.seesaw.me/pages/shared_item?item_id=item.211daa82-6e0e-4cba-a740-d3f1bedacbf8&share_token=EVWfzy4Sm6z8U68KP0n0w&mode=share)

Mrs O'Neill, parent: 'During my daughter's remote learning, it opened my eyes to see how keen she is with her "virtual hand" up to participate in class discussions. Throughout the curriculum, she is bursting to share her ideas and has matured into a thoughtful listener. I especially noticed that in her maths lessons, the process of asking children to clearly articulate their method, reinforces the importance of always following a structured approach when breaking down mathematical problems. Speaking out also helps my daughter see her own mistakes, when she is talking through her answers.'