

National Thematic Inspection: Learning and teaching in mathematics in Scotland.

Findings shared by HMIE Inspectors Stuart Cathro and Jackie Gallagher.

Strengths

- The school's self-evaluation is in line with HMIE's observations and findings. The range of evidence and quality of evidence were sound. The evidence triangulated well with pupil focus group findings and observations.
- Pupil engagement is strong.
- There are good relationships between staff and pupils.
- The inspectors liked the range of materials and the mix of strategies used within classes.
- There was appreciation of the Maths' digital planner being shared with pupils. Within it there is a clear framework for learning as well as adjustments made for individual teachers/classes.
- Structure of lessons was a positive.

BGE and Senior Phase Focus Groups Summaries

- There was an appreciation for the range of digital resources to help meet individual pupil needs. Sparx was given a particular mention.
- Knowledge organisers were viewed as a good support for learners.
- Homework was regarded as important by pupils.
- Pupils enjoyed number lines, enjoyed teacher explanations however if they were not clear they felt they could ask their teacher.
- Pupils appreciated their full reports: strengths and areas for improvement.
- Pupils felt well-supported by staff.
- Pupils appreciated worked examples especially with word problems.
- Good use of show-me boards, thumbs and cups (formative assessment).
- Teachers encourage questions.
- Targets are clear. They appreciated the colour coding of Prelims.
- Learner conversations are appreciated.
- Pupils were positive about Maths and felt they were progressing in their learning.
- Pupils felt positive about the structure of lessons.
- Pupils liked revision periods before assessments and appreciated the review of their results.

Development Needs

- More consistency in how teachers use homework to further learning.
- Refine the purpose of the lesson, what success is, and complete the circle with a meaningful plenary.
- Pupils found it difficult to remember the next steps in formulae.

- In the use of show-me boards, there should be greater consistency in following through with pupils who are making errors and showing misconceptions.
- BGE pupils did not appreciate any disruption to their learning.
- Pupils need to be better at talking about their learning specifically regarding their strengths and development needs.
- Increase pace in BGE.
- Further improve the linking of learning to real life contexts.