

An Roinn Oideachais agus Scileanna
Department of Education and Skills

Subject Inspection in Mathematics

REPORT

Ainm na scoile / School name	Bailieborough Community School
Seoladh na scoile / School address	Bailieborough Co Cavan
Uimhir rolla / Roll number	91351S

Date of Inspection: 01-05-2019



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agus Scileanna**
Department of
Education and Skills

SUBJECT INSPECTION

Subject Inspections report on the quality of work in individual curriculum areas within a school. They affirm good practice and make recommendations, where appropriate, to aid the further development of the subject in the school.

HOW TO READ THIS REPORT

During this inspection, the inspector evaluated learning and teaching in Mathematics under the following headings:

1. Teaching, learning and assessment
2. Subject provision and whole-school support
3. Planning and preparation

Inspectors describe the quality of each of these areas using the Inspectorate's quality continuum which is shown on the final page of this report. The quality continuum provides examples of the language used by inspectors when evaluating and describing the quality of the school's provision in each area.

The board of management of the school was given an opportunity to comment on the findings and recommendations of the report; the board chose to accept the report without response.

CHILD PROTECTION

During the inspection visit, the following checks in relation to the school's child protection procedures were conducted:

1. The name of the DLP and the Child Safeguarding Statement are prominently displayed near the main entrance to the school.
2. The Child Safeguarding Statement has been ratified by the board and includes an annual review and a risk assessment.
3. All teachers visited reported that they have read the Child Safeguarding Statement and that they are aware of their responsibilities as mandated persons.

The school met the requirements in relation to each of the checks above.

SUBJECT INSPECTION

INSPECTION ACTIVITIES

Dates of inspection	30-04-2019 and 01-05-2019
Inspection activities undertaken <ul style="list-style-type: none">• Review of relevant documents• Discussion with principal and key staff• Interaction with students	<ul style="list-style-type: none">• Observation of teaching and learning during five class periods• Examination of students' work• Feedback to principal, deputy principal and relevant staff

School context

Bailieborough Community School is a co-educational school with a current enrolment of 635 students: 315 girls and 320 boys. All of the curricular programmes are provided, with the exception of the Junior Certificate School Programme (JCSP). Transition Year (TY) is optional for students.

SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

Findings

- Overall, teaching and learning was very good with exemplary practice in a majority of lessons; the widespread reflective practice and collaborative lesson planning amongst the mathematics teachers have contributed significantly to this finding.
- Students were highly active, motivated and interested in learning Mathematics and demonstrated very good understanding of the concepts taught.
- Students with special educational needs were very well supported; there was scope for better planning in one of the co-taught lessons observed.
- Subject provision and whole-school support for Mathematics is very good overall.
- The school's self-evaluation (SSE) process and other whole-school initiatives are highly effective in supporting very good student outcomes in Mathematics.
- The members of the mathematics department work exceptionally well as a team and the quality of the mathematics plan is very good; this work is driven by and is indicative of the commitment of the teachers and the care they show to the students and their learning.

Recommendations

- The very high quality collaborative planning evident in one of the co-taught lessons observed should be extended to all co-taught lessons.

DETAILED FINDINGS AND RECOMMENDATIONS

1. TEACHING, LEARNING, AND ASSESSMENT

- The quality of teaching and learning in the lessons observed was very good. There was exemplary practice in a majority of lessons and only minor recommendations for improvement. The widespread reflective practice and collaborative lesson planning amongst the mathematics teachers have contributed significantly to the very high quality of teaching and learning evident.
- Teacher instruction was clear and conceptual in all lessons. New learning was very well connected to prior learning and situated in appropriate mathematical and real-life contexts. In some lessons, a highly-effective investigative approach was used to introduce new concepts; the scaffolding of the tasks and strategic use of consolidation in these instances ensured that students were empowered to discover Mathematics for themselves with minimal need for additional teacher input.
- Students were very active, motivated and interested in learning Mathematics. They worked very well independently, in pairs and in groups. They discussed Mathematics, problem solved, and used logic to tackle difficult concepts. Additionally, their contribution demonstrated very good understanding of the concepts taught. In almost all lessons, the balance between teacher and student input was very good. One lesson required an adjustment to ensure a better balance.
- A range of valuable resources including digital presentations, matching games, electronic spreadsheets, probability equipment, and handouts was effectively used to enhance explanations and to facilitate independent and collaborative learning.
- The quality of assessment was very good in all lessons. Mini white-boards were used to assess understanding, prompt additional teacher instruction and, in the best lessons, to facilitate student self-assessment and discussion. Learning was very effectively assessed through teacher observation. Additionally, the learning objectives were shared with students and progress towards their achievement was well monitored throughout lessons.
- Team teaching was observed in two lessons. Best practice was noted where the teachers had planned all aspects of the lesson together, including the teaching and learning, and had adapted the plan as learning needs changed. In one lesson, while the teachers had a broad understanding of each other's roles, there was a need for deeper planning.
- The quality of teacher questioning was particularly good. Teachers used higher-order questioning strategies to help students to develop their thinking and to deepen learning. Students participated very well and demonstrated confidence in asking and answering questions. Questioning was also used very effectively to facilitate repetition.
- Students with special educational needs were very well supported in the lessons observed. Where a co-teacher or special-needs assistant was assigned, their presence was attentive but unobtrusive. They ensured that the students had the space to learn independently, could participate fully in all lesson activities and had access to support and encouragement from their teachers where necessary.

2. SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- Subject provision and whole-school support for Mathematics is very good overall. There is a very good range of resources available for the subject, including digital technology. Four periods per week are currently provided for junior cycle Mathematics; this provision is in line with the Junior Cycle recommended minimum allocation. Subject provision in the senior cycle is very good.

- There are highly effective arrangements to enable students to access Mathematics at a level appropriate to their ability. Students are encouraged to study Mathematics at the highest level possible and the very good uptake of higher level in the certificate examinations is evidence of the success of this approach.
- The members of the mathematics department participate extensively in continuing professional development (CPD). There is a valuable culture of sharing the learning from such participation and ensuring that new methodologies and approaches are integrated into classroom practice.
- The SSE process and other whole-school initiatives are highly effective in supporting very good student outcomes in Mathematics. The 2018/2019 SSE focus is on improving attainment and makes valuable connections between teacher and student wellbeing, and achievement. A subject-specific version of the SSE plan has been created by the mathematics department and targets areas of particular relevance to Mathematics. All of the available data are used in a highly effective manner to monitor progress.
- There is excellent practice in relation to ensuring that the student voice inputs into improvement planning for Mathematics. There are highly structured processes for capturing the student voice through self-reflection on learning, academic profiling and mentoring, and through teachers providing a framework for active student voice in the classroom.
- Valuable extra-curricular opportunities are provided for students to experience Mathematics for fun. There is a lunch time drop-in club for students requiring assistance with Mathematics.

3. PLANNING AND PREPARATION

- The members of the mathematics department work exceptionally well as a team. Reflective practice is a very strong and valuable feature of their work. They collaborate extensively, both formally and informally. They plan lessons together and provide support and advice for each other where necessary. An electronic planning system is used very effectively to share resources for teaching and learning.
- The quality of the mathematics plan is very good. Programmes of work have been developed for each year group and level. Considerable work has been done on ensuring that the new junior cycle specification's learning intentions, statements of learning and key skills are incorporated as an integral part of the programmes of work.
- There is a professional and strategic approach to developing and continually improving teaching and learning in the subject. The minutes of mathematics meetings show extensive sharing of expertise, trialling, evaluating and refining new approaches, and discussion around best classroom practice. It is evident that the meetings are used to extend and embed SSE priorities, learning from CPD and other whole-school initiatives such as the digital strategy.
- The school's plan for numeracy and the mathematics department's plan for literacy are excellent. A range of valuable numeracy measures have been devised specific to each subject which promote numeracy as well as learning in the subjects themselves. The numeracy focus group comprises teachers from a range of subjects. Additionally, members of the mathematics department bring a valuable mathematical perspective to a number of whole-school focus groups.

The draft findings and recommendations arising out of this evaluation were discussed with the principal, deputy principal and subject teachers at the conclusion of the evaluation.

THE INSPECTORATE'S QUALITY CONTINUUM

Inspectors describe the quality of provision in the school using the Inspectorate's quality continuum which is shown below. The quality continuum provides examples of the language used by inspectors when evaluating and describing the of quality the school's provision of each area.

Level	Description	Example of descriptive terms
Very Good	Very good applies where the quality of the areas evaluated is of a very high standard. The very few areas for improvement that exist do not significantly impact on the overall quality of provision. For some schools in this category the quality of what is evaluated is outstanding and provides an example for other schools of exceptionally high standards of provision.	Very good; of a very high quality; very effective practice; highly commendable; very successful; few areas for improvement; notable; of a very high standard. Excellent; outstanding; exceptionally high standard, with very significant strengths; exemplary
Good	Good applies where the strengths in the areas evaluated clearly outweigh the areas in need of improvement. The areas requiring improvement impact on the quality of pupils' learning. The school needs to build on its strengths and take action to address the areas identified as requiring improvement in order to achieve a <i>very good</i> standard.	Good; good quality; valuable; effective practice; competent; useful; commendable; good standard; some areas for improvement
Satisfactory	Satisfactory applies where the quality of provision is adequate. The strengths in what is being evaluated just outweigh the shortcomings. While the shortcomings do not have a significant negative impact they constrain the quality of the learning experiences and should be addressed in order to achieve a better standard.	Satisfactory; adequate; appropriate provision although some possibilities for improvement exist; acceptable level of quality; improvement needed in some areas
Fair	Fair applies where, although there are some strengths in the areas evaluated, deficiencies or shortcomings that outweigh those strengths also exist. The school will have to address certain deficiencies without delay in order to ensure that provision is satisfactory or better.	Fair; evident weaknesses that are impacting on pupils' learning; less than satisfactory; experiencing difficulty; must improve in specified areas; action required to improve
Weak	Weak applies where there are serious deficiencies in the areas evaluated. Immediate and coordinated whole-school action is required to address the areas of concern. In some cases, the intervention of other agencies may be required to support improvements.	Weak; unsatisfactory; insufficient; ineffective; poor; requiring significant change, development or improvement; experiencing significant difficulties;