



Subject Inspection: Mathematics REPORT

Ainm na scoile/School
name Stratford College

Seoladh na
scoile/School address 1 Zion Road
Rathgar
Dublin 6

Uimhir rolla/Roll
number 61020A

Dáta na cigireachta/
Date of evaluation 04/12/2024

Dáta eisiúna na
tuairisce/Date of issue
of report 23/01/2025

What is a 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.

Included in this subject inspection report is a student-friendly page that provides information for the children/young people in your school about the inspection that occurred recently. It outlines for them some of the main findings and recommendations.

The board of management was given an opportunity to comment in writing on the findings and recommendations of the report; a response was not received from the board.

Actions of the school to safeguard children and prevent and tackle bullying

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

<i>Child Protection</i>	<i>Anti-bullying</i>
<ol style="list-style-type: none">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.	<ol style="list-style-type: none">1. The school has developed an anti-bullying policy that meets the requirements of the <i>Anti-Bullying Procedures for Primary and Post-Primary Schools (2013)</i> or <i>Bí Cineálta (2024)</i> and this policy is reviewed annually.2. The school's current anti-bullying policy is published on its website and/or is readily accessible to board of management members, teachers, parents and students.

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

Subject inspection

Date of inspection	04/12/2024 and 05/12/2024
Inspection activities undertaken <ul style="list-style-type: none">Review of relevant documentsDiscussion with principal and key staffInteraction with students, including focus groups	<ul style="list-style-type: none">Observation of teaching and learning during 5 lessonsExamination of students' workFeedback to principal and relevant staff

School context

Stratford College is a fee-charging, co-educational, voluntary secondary school under the trusteeship of Dublin Talmud Torah with an enrolment of 192 students. The school offers the Junior Cycle (JC) programme, the established Leaving Certificate and a compulsory Transition Year programme (TY).

Summary of main findings and recommendations:

Findings

- The quality of teaching and learning was good overall, with very good practices observed in many lessons.
- Lessons were well prepared and well structured with very good learning resources provided in most lessons observed.
- The quality of assessment was good overall, teachers monitored progress and provided support when required but in a few instances assessment needed to be more effective to identify gaps in learning.
- Relationships between students and teachers were very good.
- Subject provision and whole-school support for the subject and arrangements for students requiring additional support with Mathematics were very good.
- Subject planning was good, with some aspects requiring attention, including the use of available data to inform decision-making.

Recommendations

- Teachers should ensure that ongoing monitoring and assessment is of sufficient depth to enable teachers to identify and address gaps in understanding.
- All available relevant statistical data and information should be used to inform decision-making for Mathematics, and to monitor student progress and outcomes.
- To support all student needs and ensure that all students are suitably challenged, teachers should collaborate to further plan and develop differentiated teaching approaches in Mathematics.

Detailed findings and recommendations

1. Teaching, learning and assessment

- The quality of teaching and learning was good overall, with very good practices observed in many lessons.
- The majority of lessons were well planned. Learning intentions were shared with students at the start of lessons and revisited at the end, which is good practice. In most lessons, teachers had prepared very good resources to support learning and had planned for a variety of learning activities. Teachers used appropriate mathematical terminology and language and this was good practice. In a few lessons, high quality teacher instruction, combined with individual, or pair activities was observed.
- The atmosphere in all classrooms visited was warm and respectful. Students received encouragement and support from their teachers. Their contributions were valued, which encouraged active participation in lessons. Students confidently asked questions, engaged in class discussion and in most instances, were purposefully engaged with the learning tasks. In a few lessons, there were students who were not sufficiently challenged and would have benefitted from activities more suited to their abilities and this should be addressed.
- Team teaching was observed in one lesson with the teachers alternating instruction and provision of support. There were many positive aspects to this approach including very good one-to-one support and the opportunity to conduct individual formative assessment of students work. This was a well planned lesson. Teachers should continue to further develop this practice in relation to assessment for learning.
- Highly effective teaching for understanding was evident in a few lessons. For example, in one lesson on differentiating functions the teacher used very effective question and answering techniques to assess student's prior knowledge. Students demonstrated very good subject knowledge and confidently made connections between various slope formulae, equations of lines and derivatives. Cross-curricular links between Science, Technology, Engineering and Mathematics (STEM) subjects such as Chemistry and Biology provided excellent examples of real-world applications of rates of change. This is very good practice.
- In all lessons, students had opportunities to collaborate with colleagues seated next to them. In one lesson, students were purposefully engaged in a pair activity creating their own Venn diagrams. Individual students confidently presented these designs to the class and were asked to interrogate them using set notation. This approach to developing student's communication skills was evident in the majority of lessons and should be embedded as a common approach within the mathematics department.
- The quality of assessment was good, overall. In all lessons, students had the opportunity to work independently, in groups or in pairs. This valuable practice allowed teachers space to circulate the room to assess progress and to provide assistance where necessary. The teachers were particularly effective in using this assessment approach to inform lesson activities. There was a need in a few lessons for deeper assessment to more accurately establish the gaps in learning. Teachers should ensure that ongoing monitoring, and assessment is of sufficient depth to enable teachers to identify and address gaps in understanding.
- Students who participated in the focus group were very reflective on their learning in Mathematics. They described how they enjoyed Mathematics and found it fun. They stated that their teachers were very good at providing help and explaining processes. They felt much supported. When asked about their experiences in relation to team teaching, students described this as being a very good experience.

- There was limited use of digital technologies in the lessons observed and this was identified as an area in need of development. In one lesson, students used online graphing software to investigate aspects of linear functions. Teachers should consider how to further develop this effective practice by incorporating digital manipulatives, graphing software, and real-world examples as appropriate. Students commented on how teachers made effective use of the school's online platform to post class notes, marking schemes of topic assessments and other learning aids. They described these class resources as being very helpful.

2. Subject provision and whole school support

- Subject provision and whole school support for Mathematics was very good. Lessons were of fifty-eight minutes duration, with first, second, and third years receiving three lessons per week. Four lessons per week were provided for fifth and sixth year. This provision is in line with subject specification requirements. Provision of resources for teaching, including digital resources, was very good.
- Effective concurrent timetabling was in place for year groups after first year allowing for the placement of students into level-specific classes best suited to their abilities. This placement occurs after the first term of second year. It is commendable that the department maintained mixed-ability classes for as long as possible allowing students to make more informed decisions on their future course.
- In TY, common level classes were set in order of ability and achievement, resulting in disproportionate class sizes. Depending on their achievement, students could move up or down within these classes. The practice of organising class groups in order of ability should be reviewed, and consideration given to having mixed-ability groups.
- Provision for students with additional educational needs was very good. Individual and small-group supports were the main modes of delivery of learning support in Mathematics, including in class support. Subject teachers worked closely with the special educational needs (SEN) department to design activities which complimented current classroom practice. Student Support Files (SSFs) were available and provided the relevant information required to inform subject teachers of the individual needs of their students. The Level One Learning Programme (L1LP) was available to students who met the criteria for this level of support. The school has made considerable efforts to provide inclusion for the numerical and mathematical development of all its young people and this is to be commended.

3. Planning and preparation

- The overall quality of planning and preparation was good, with some aspects of departmental planning requiring development. Individual lesson planning ranged from good to excellent.
- Departmental schemes of work were available for all year groups and programmes, and these were of a good quality. They outlined an agreed-upon sequence of topics, learning outcomes, assessment and resources which included online notes and links to support videos. The Mathematics department should work collaboratively to further develop these schemes by considering the inclusion of agreed-upon common teaching methodologies. There was also further development of subject planning required in relation to differentiated learning, where content, activities and assessment should be tailored to address the needs of all learners.
- The present subject co-ordinator had held the position for a number of years. It is recommended that the role of coordinator be rotated between teachers to build leadership capacity. The same teacher takes the higher level LC each year. It was recommended that higher level be rotated between teachers in the interest of maintaining the expertise to teach this level within the school.

- The Mathematics department worked well as a team. Formal and informal subject department meetings provided opportunities to discuss assessment arrangements, organisational matters, and analysis of student performance. The minutes of meetings are stored on the shared drive.
- The TY plan is of good quality but is overly based on JC and LC content. It is recommended that teachers further develop the TY programme to include more contextual learning and dynamic modules. The programme should also be designed to include opportunities to participate in student led projects that promote, active learning, real-life contextual learning, problem solving, and discovery.
- Examination data were analysed annually, and comparisons made with national averages. The mathematics department had access to individual students' standardised test scores, and summary data on the profile of each year group. It is recommended that analyses of this internal data are completed and used to inform practice and facilitate decision-making in the subject.

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.



**For the students of Stratford
College about their learning in
Mathematics**
Date of inspection: 04/12/2024

What kind of inspection did your school have?



A subject inspection was completed in your school. The inspector observed lessons and spoke with the principal and teachers. The inspector met with a group of students to talk to them about their learning in Mathematics.

What were the main findings of the inspection?



The inspector saw many things during the inspection. The main findings are:

- Teaching, learning and assessment were good overall, and students and teachers got on well together.
- There was good planning for Mathematics but teachers needed to use data better when they were making decisions.
- There were very good resources for Mathematics and there were very good arrangements for students who needed support with Mathematics.

What did the inspector recommend to make teaching and learning better in Mathematics?



- Teachers should check students work to see how they are getting on with their learning and tell them how to improve.
- Teachers should carry out an analysis of students' results to see how they can best help them improve their learning.
- The teachers should work together to decide how best to improve the learning experiences of all students.

**Thank you for taking the time to read this page.
Special thanks to the students who participated in the focus group.**

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 quality of the school's provision of each area.

Level	Description	Examples of descriptive terms
Excellent	Provision that is excellent is exemplary in meeting the needs of learners. This provision provides an example for other schools and settings of exceptionally high standards of provision.	Excellent; exemplary; outstanding; exceptionally high standard; with very significant strengths
Very good	Provision that is very good is very effective in meeting the needs of learners and is of a very high standard. There is potential to build on existing strengths to achieve an excellent standard.	Very good; of a very high quality; very effective practice; highly commendable; very successful
Good	Provision that is good is effective in meeting the needs of learners. There is need to build on existing strengths in order to address the aspects to be developed and achieve a very good standard.	Good; of good quality; effective practice; competent; useful; commendable; good standard; strengths outweigh the shortcomings; appropriate provision although some possibilities for improvement exist
Requires improvement to achieve a good standard	Provision that requires improvement to achieve a good standard is not sufficiently effective in meeting the needs of learners. There is need to address certain deficiencies without delay in order to ensure that provision is good or better.	Fair; less than effective; less than sufficient; evident weaknesses that are impacting on learning; experiencing difficulty; shortcomings outweigh strengths; must improve in specified areas; action required to improve
Requires significant improvement to achieve a good standard	Provision that requires significant improvement to achieve a good standard is not meeting the needs of learners. There is immediate need for significant action to address the areas of concern.	Weak; poor; ineffective; insufficient; unacceptable; experiencing significant difficulties; serious deficiencies in the areas evaluated; requiring significant change, development and improvement to be effective