

**An Roinn Oideachais agus Scileanna**  
**Department of Education and Skills**

**Subject Inspection in Mathematics**

**REPORT**

<b>Ainm na scoile / School name</b>	Our Lady's Bower
<b>Seoladh na scoile / School address</b>	Retreat Road Athlone Co Westmeath
<b>Uimhir rolla / Roll number</b>	63210P

**Date of Inspection: 27-02-2020**



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

## **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

<b>Dates of inspection</b>	26-02-2020 & 27-02-2020
<b>Inspection activities undertaken</b> <ul style="list-style-type: none"><li>• Review of relevant documents</li><li>• Discussion with principal and key staff</li><li>• Interaction with students</li></ul>	<ul style="list-style-type: none"><li>• Observation of teaching and learning during eight lessons</li><li>• Examination of students' work</li><li>• Feedback to principal and relevant staff</li></ul>

### School context

Our Lady's Bower is an all-girls post-primary school located in Athlone, Co. Westmeath operating under the patronage of La Sainte Union des Sacré Coeurs. With a current enrolment of 706 students the school offers the junior cycle, an optional Transition Year, the established Leaving Certificate and the Leaving Certificate Applied.

### SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

#### Findings

- The quality of teaching was good or better in all but one of the lessons visited during the inspection.
- Very good planning for student learning supported by high-quality teacher questioning was a key feature of the best lessons.
- There was scope to provide students with greater opportunities for self-directed learning in some lessons.
- Pair and group work featured in the majority of lessons and was most effective where students engaged with model-making and other hands-on tasks.
- Many of the lessons would have been enhanced had students been provided with more opportunities to showcase their learning through presentations and discussion.
- Collaborative planning in Mathematics is good and a comprehensive subject department plan is in place, however the schemes of work in the plan need to be updated to reflect the reformed specifications.

#### Recommendations

- It is recommended that strategies to enhance the role of the student voice in making learning more visible and in deepening understanding be more widely adopted across the mathematics department.
- It is recommended that the schemes of work in the subject department plan be reconfigured to comprise units of work that cut across the strands of the specifications and give greater guidance in navigating a non-linear path through the curriculums at junior and senior cycle.

## DETAILED FINDINGS AND RECOMMENDATIONS

### 1. TEACHING, LEARNING, AND ASSESSMENT

- The quality of teaching and learning was very good in a small majority of lessons and good in all but one of the remaining lessons. In this lesson the quality of teaching and learning was satisfactory.
- The best lessons featured very good planning for student learning within which an appropriate level of challenge presented to all students. This was manifest in the nature of the tasks with which the students were presented and the breadth and depth of teacher questioning.
- In some lessons there was scope to enhance the balance between teacher input and the provision of opportunities for student self-directed learning. In these lessons there was scope to differentiate the lesson content so that all students, particularly the more able, were appropriately challenged.
- Where there was considerable room for improvement in both teaching and learning, the students were not provided with opportunities to share their learning with their peers. For example, student learning would have been greatly enhanced if difficulties encountered by individuals were explored in a whole-class setting, and if different approaches to solving problems were explicitly discussed.
- The integration of digital technologies was seen to very good effect in two lessons. In one, the technologies were used by the students to research, analyse and collate their findings. In the other, students engaged with an interactive platform that provided them with feedback on their progress and allowed them to encounter increasingly more elaborate problems as the lesson progressed.
- Pair and group work featured in the majority of lessons and was seen to best effect where the students had the opportunity to make models, take measurements and arrive at a consensus through discussion.
- An area of improvement in the majority of lessons is the provision of opportunities for students to showcase their learning. This might include students reporting to the entire class following group work, or whole-class discussions where students conjecture, make propositions, draw conclusions and defend their reasoning. It is therefore recommended that strategies to enhance the role of the student voice in making the learning more visible, and in deepening student understanding be more widely adopted than is currently the case.
- Assessment for learning (AfL) featured in all but one lesson. AfL approaches were seen to greatest effect in two lessons where multiple choice questions were used to expose the students to a number of plausible answers to a range of questions. This approach encouraged students to deal with ambiguity and highlighted the common misconceptions that led students to opt for incorrect answers. In the remaining lessons teacher questioning was effective but greater emphasis should have been placed on the use of higher-order questions.
- The effective development of students' mathematical skills was a feature of the vast majority of lessons. Very good use was made of correct terminology and the approaches used to carry out common mathematical operations were robust. The teachers also provided very good explanations of the concepts underpinning the skills being developed during the lessons.

## **2. SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT**

- Timetabling provision for Mathematics is very good. The time allocated to mathematics teaching in junior cycle is sufficient and allocation in senior cycle is very generous. Since the introduction of the junior cycle reforms, Mathematics is provided in mixed-ability settings until the end of second year. Mathematics classes are timetabled concurrently in third year, which reduces the disruption to the students' timetables in the event of their needing to change level during the year.
- The senior management provides very good leadership for teaching and learning. This was evident, for example, in extensive guidance provided to subject departments on planning for the implementation of the junior cycle reforms and in the support provided to enable teacher collaborative practice.
- Teacher collaborative practice in Mathematics is very good. The members of the department co-operate very effectively in running the department, preparing common assessments sharing experiences upon returning from professional learning events and in the use of digital technologies for sharing lesson materials.
- The mathematics teachers are assiduous in pursuing their professional development and, at the time of the evaluation, a number of the teachers had engaged with the Professional Development Service for Teachers in implementing an innovative project in numeracy with their first-year students.
- Mathematics is very effectively promoted throughout the school. A mathematics club meets every week, the school is adorned with mathematics-specific posters, and the students participate in a range of inter-school competitions relating to Mathematics.

## **3. PLANNING AND PREPARATION**

- Collaborative planning in Mathematics is good. A comprehensive subject department plan is in place. The plan addresses all aspects of the department's work and contains schemes of work for each year and level.
- The schemes of work contained in the plan are not properly aligned to the requirements of the reformed specifications, and it is recommended that this be addressed in future department planning activities. The schemes should be reconfigured to comprise units of work that cut across the strands of the specifications and give greater guidance in navigating a non-linear path through the curriculums at junior and senior cycle.
- Department planning in Mathematics is greatly facilitated by the department's collaborative online space. This facility enables synchronous and asynchronous planning, and is used to very good effect in sharing resources and preparing common assessments.

The draft findings and recommendations arising out of this evaluation were discussed with the principal, deputy principals 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 quality of the school's provision of each area.

Level	Description	Example of descriptive terms
<b>Very Good</b>	<b>Very good</b> 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 <b>outstanding</b> 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
<b>Good</b>	<b>Good</b> 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
<b>Satisfactory</b>	<b>Satisfactory</b> 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
<b>Fair</b>	<b>Fair</b> 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
<b>Weak</b>	<b>Weak</b> 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;