

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

**Subject Inspection in Mathematics**

**REPORT**

|   |                           |
|---|---------------------------|
| <b>Ainm na scoile /<br/>School name</b>       | Mercy Secondary School    |
| <b>Seoladh na scoile /<br/>School address</b> | Ballymahon<br>Co Longford |
| <b>Uimhir rolla /<br/>Roll number</b>         | 63710M                    |

**Date of Inspection: 06-04-2017**



### **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. Learning, teaching 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 in writing on the findings and recommendations of the report, and the response of the board will be found in the appendix of this report.

## Subject Inspection

### INSPECTION ACTIVITIES DURING THIS INSPECTION

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| <b>Date of inspection</b>  | 06-04-2017   |
| <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 class periods</li><li>• Examination of students' work</li><li>• Feedback to principal and relevant staff</li><li>• Discussion with the learning support team</li></ul> |

### SCHOOL CONTEXT

Mercy Secondary school is a voluntary secondary school operating under the trusteeship of Catholic Education an Irish School's Trust. The school currently has 622 students enrolled and enrolment is increasing. The curricular programmes provided include the Junior Certificate, Transition Year and the established Leaving Certificate.

### SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

#### FINDINGS

- The quality of teaching and learning varied from very good to fair with the majority of lessons being good or better.
- Where learning was best, the lessons featured very good use of learning intentions, a very good balance between teacher input and student activity and student engagement with rich tasks.
- All of the lessons were marked by respectful interactions and positive contributions by students.
- Timetabling provision for Mathematics in all years, apart from first year, is good.
- The qualifications profile and the deployment of the mathematics teachers is very good.
- Ongoing assessment practices in Mathematics are very good.

#### RECOMMENDATIONS

- In order to address fair teaching practice evident in a lesson, future subject planning in Mathematics should seek to ensure more consistent use of learning intentions, greater depth of treatment of lesson content and adherence to the teaching approaches espoused in the subject department by all members of the department.
- Timetabling provision for Mathematics in first year should be kept under constant review and every effort be made to increase the provision to one period of Mathematics per day in future timetables.
- A whole-school assessment policy should be developed at the earliest opportunity.

## DETAILED FINDINGS AND RECOMMENDATIONS

### 1. TEACHING, LEARNING AND ASSESSMENT

- The quality of teaching varied from very good to fair with the majority of lessons being good or better.
- The quality of student learning matched that of the teaching with the majority of students engaging in good to very good learning.
- The most effective lessons featured very good use of learning intentions, which were clearly outlined at outset and were fully interrogated as the lessons unfolded. More pertinently, the learning intentions were sufficiently elaborate to facilitate student engagement with rich tasks that served to deepen their understanding of the key concepts underpinning the lesson content. Very good plenaries, to determine the extent to which the learning intentions were realised, were conducted in each case.
- These lessons also featured a mix of teaching methods that allowed for a very good balance between teacher input and student activity. Such practices provided sufficient opportunities for students to, discuss, reflect, develop hypotheses and defend their reasoning.
- Where there was some scope for improvement, the lessons would have benefited from a more thorough interrogation of the lesson content. This could be achieved covering less material in greater depth and presenting the students with rich tasks that would allow them engage with multiple approaches to solving problems
- In a lesson where teaching was less than satisfactory considerable scope for improvement was noted, the lesson intention was unclear, the content appeared to deviate from that contained in the subject department plan and the treatment of the content was shallow. As a result, the quality of student learning was less than desirable. While the students were able to complete the assigned tasks, the purpose of the tasks and the relevance to the students of the solutions they arrived at were unclear. These shortcomings should be addressed through collaborative planning to ensure that all teachers of Mathematics understand and make effective use of the learning intentions and adhere to the schedule of delivery contained in the subject department plan.
- All of the teachers modelled positive dispositions toward Mathematics and all of the lessons featured respectful interactions and positive contributions from the students.

### 2. SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- Timetabling provision for Mathematics in senior cycle is good. All senior cycle students are provided with four single and one double period of Mathematics per week. At the time of the evaluation, the lesson periods were either 37 or 38 minutes long. Management intends to address this anomaly to ensure compliance with Circular Letter 0015/2017 whereby all periods will have a duration of 40 minutes. The scheduling of mathematics lessons including the balance of provision across the week is very good.
- The situation pertaining to the timetabling of Mathematics in first year is less than ideal. First-year students are provided with four periods of Mathematics per week. It would be preferable if these students were provided with an additional period. It is recommended, therefore, that this situation be kept under constant review and every effort be made to make increased provision in future timetables.

- The qualifications profile of the mathematics department is very good and the teachers are deployed in line with their qualifications.
- The mathematics department is very well resourced. All of the mathematics teachers have access to the schools Information and communications technology infrastructure and to a range of resources intended to support active teaching and learning.
- There is, as yet, no whole-school assessment policy in place. Despite its absence, ongoing assessment practices including the assignment and correction of homework and the use of assessment for learning during lessons were either good or very good.
- Formal assessment in Mathematics is also well managed and features the use of common papers with agreed marking schemes, within levels, for all house examination. Notwithstanding this good practice, it is recommended that a whole-school assessment policy be developed at the earliest opportunity.

### **3. PLANNING AND PREPARATION**

- Subject department planning in Mathematics is well established and a comprehensive subject department plan for Mathematics is in place. The plan is written in a manner that reflects the aims and objectives of the revised curriculums and follows a logical sequencing of topics.
- In the vast majority of lessons, the teaching approaches and the lesson content were in line with that espoused in the plan. In a minority of cases where there was departure from this approach the quality of learning deteriorated as a result. To address this, it is recommended that future planning in Mathematics ensure consistency in adherence to the subject department plan and sharing of expertise on the most effective ways in which the curricular aims can be achieved.

## 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 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;   |

# **Appendix**

**SCHOOL RESPONSE TO THE REPORT**

**Submitted by the Board of Management**

**Area 1 Observations on the content of the inspection report**

**Area 2 Follow-up actions planned or undertaken since the completion of the inspection activity to implement the findings and recommendations of the inspection.**

- Regular Mathematics department meetings will continue to take place ensuring that all teachers are following Subject department plan.
- 1<sup>st</sup> year Mathematics timetable 17/18 is allocated five 40 minute periods.
- Work is progressing on a whole-school assessment policy.