

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

**Subject Inspection in Mathematics**

**REPORT**

<b>Ainm na scoile / School name</b>	Roscommon Community School
<b>Seoladh na scoile / School address</b>	Lisnamult Roscommon County Roscommon
<b>Uimhir rolla / Roll number</b>	72290R

**Date of Inspection: 20-11-2018**



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An Roinn Oideachais  
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>	19-11-2018 and 20-11-2018
<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; six single and two double periods.</li><li>• Examination of students' work</li><li>• Feedback to principal and relevant staff</li></ul>

### School context

Roscommon Community College is a co-educational post-primary school operating under the auspices of Galway and Roscommon Education and Training Board (GRETB), and is one of three post-primary schools in the town of Roscommon. The school participates in Delivering Equality of Opportunity in Schools (DEIS), the action plan of the Department of Education and Skills for educational inclusion. The programmes offered are the Junior Certificate, a compulsory Transition Year (TY), the Leaving Certificate Vocational Programme and the Leaving Certificate. At the time of the evaluation, enrolment stood at 461 students.

### SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

#### Findings

- The overall standard of teaching and of learning was good; this ranged from very good in the majority of lessons to good or satisfactory in the remainder of lessons with some examples of excellent practice.
- Learning through discovery and student collaboration was central to the approach taken in most lessons; there was scope for a more student-led approach in some cases.
- Subject provision and whole-school support for Mathematics are very good.
- The teachers of Mathematics are very well qualified and place a high level of value on continuing professional development (CPD).
- Students in need of additional numeracy support are very well catered for.
- Planning and preparation for Mathematics are of a very high standard; there is scope for a change of emphasis in the plan for TY.

#### Recommendations

- More open-ended, task-based activities should be incorporated into lessons.
- The TY mathematics plan should be driven by a series of key assignments through which students can gain a more complete appreciation of the purpose and origins of the various mathematical disciplines.

## DETAILED FINDINGS AND RECOMMENDATIONS

### 1. TEACHING, LEARNING, AND ASSESSMENT

- The overall standard of teaching and of learning was good; this ranged from very good in the majority of lessons to good or satisfactory in the remainder of lessons with some examples of excellent practice. In general, teachers set high expectations for student learning and students demonstrated high levels of interest and confidence in expressing their ideas and opinions.
- Collaboration between students was facilitated in all of the lessons observed. This was achieved primarily through the use of pair work and small group activities. The best activities required students to investigate a problem, to present findings and to justify their findings mathematically. Students engaged very well with such activities in most cases, indicating that such activities are part of their daily routine.
- Discovery learning was used to very good effect in some lessons. In such cases, students were presented with a scaffolded task through which the main learning intentions of the lesson emerged. Students demonstrated high levels of ability to synthesise the available information and to draw sound conclusions.
- In some lessons, students would have benefited from the inclusion of more open-ended task-based activities. Such activities would facilitate greater differentiation through allowing students to proceed at a pace suited to their aptitudes. This would also allow the teacher to engage in more focused interventions rather than shorter activities with frequent teacher intervention at whole-class level.
- Digital technology was used in all of the lessons observed. Usage ranged from the presentation of information to the widespread interaction of students with subject-specific software for graphing and interpreting functions. There was also timely incorporation of video clips in some lessons to illuminate a topic and to facilitate efficient progress through the lesson.
- Summative assessment practices are well established and students' attainment is measured at various points throughout the year. The data from these assessments is used for a variety of purposes including the provisional setting of levels and to assist in identifying students in need of additional support.
- Formative assessment is primarily in the form of comments on students' work. Such comments provide affirmation to students and guide them towards improvement. Other formative assessment practices observed included the use of a traffic light system through which students could indicate their level of understanding. Mini whiteboards were also used as an assessment tool in some lessons. The use of formative assessment should be discussed further among the teachers of Mathematics with a view to continuing the enhancement of practice in this area.
- Teachers have created stimulating learning environments through the display of students' work as exemplars, alongside content such as key terminology, number lines, posters and charts. Such content was referred to in some lessons to support teachers' presentations.

### 2. SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- Subject provision and whole school support for Mathematics are very good. Timetable provision is in line with syllabus/specification requirements in all year groups and there is an allocation of seven periods of Mathematics per week for fifth and sixth-year students.

- First-year and TY students are taught in a mixed-ability setting in line with best practice. In other year groups, students are taught in level-specific classes where concurrent timetabling facilitates the movement of students between levels where necessary. A consultative approach is taken to ensuring that students study at a level commensurate with their abilities and aspirations.
- All of the mathematics teachers satisfy the requirements of the Teaching Council for the teaching of Mathematics. In addition, management and teachers place a high level of value on CPD and have availed of a variety of upskilling and further study opportunities related to Mathematics.
- Students in need of additional numeracy support are very well catered for through a flexible model of support. In-class supports such as team teaching are used in conjunction with small-group and one-to-one withdrawal in cases where more focused interventions are required. Students identified as having needs in the severe/profound to low moderate range also have access to level one learning programmes as part of the revised Junior Cycle programme. A small number of students are availing of this pathway currently.
- Teachers encourage and organise students to get involved in a range of extra-curricular and co-curricular activities related to Mathematics. Students from the school have experienced considerable success in recent competitions related to Mathematics and Statistics.

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

- Planning and preparation for Mathematics are of a very high standard. Department meetings are facilitated periodically throughout the year and the minutes of these meetings are retained electronically. These minutes indicate a strong teaching and learning focus combined with necessary operational matters.
- The subject plan, including short-term plans of work, is very well developed. The teachers of Mathematics have engaged very well with the revised junior-cycle specification for Mathematics and the associated plan of work is very well developed. The assessment focus across the plans of work for other year groups is primarily summative in nature. The renewed focus on formative assessment as part of the revised junior-cycle specification should now inform assessment planning across all year groups.
- Action planning for improvement is key to the approach taken by the teachers of Mathematics. Such an approach is very much in keeping with the school's involvement with DEIS action planning. A comprehensive list of key targets related to numeracy has been compiled along with associated actions and success criteria.
- The TY plan is laid out in terms of content to be covered in advance of students' participation in a variety of project-based activities and mathematics-related competitions. In order for students to gain a greater sense of the evolution of the various curricular strands, it is recommended that the coverage of content be driven by a series of key assignments. Such assignments should foster a more student-led approach with the ultimate aim of further enhancing student engagement.

The draft findings and recommendations arising out of this evaluation were discussed with the 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
<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;