An Roinn Oideachais
Department of Education

Subject Inspection: Mathematics
Report

REPORT

Ainm na scoile/School name	Coláiste Muire
Seoladh na scoile/School address	College Road Ennis Co Clare
Uimhir rolla/Roll number	61930Q
Dáta na cigireachta/ Date of evaluation	16-05-2023
Dáta eisiúna na tuairisce/Date of issue of report	04/10/2023

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.

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.

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

<table>
<tr><td colspan="2">During the inspection visit, the following checks in relation to the school's child protection and anti-bullying procedures were conducted:</td></tr>
<tr><td>Child Protection</td><td>Anti-bullying</td></tr>
<tr><td>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.</td><td>1. The school has developed an anti-bullying policy that meets the requirements of the Anti-Bullying Procedures for Primary and Post-Primary Schools (2013) and this policy is reviewed annually.
2. The board of management minutes record that the principal provides a report to the board at least once a term on the overall number of bullying cases reported (by means of the bullying recording template provided in the Procedures) since the previous report to the board.
3. The school's anti-bullying policy is published on its website and/or is readily accessible to board of management members, teachers, parents and students.</td></tr>
</table>

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

Subject inspection

Dates of inspection	15 & 16 May 2023
Inspection activities undertaken • Review of relevant documents • Discussion with principal and key staff • Interaction with students including a focus group meeting	• Observation of teaching and learning during eight lessons • Examination of students' work • Feedback to principal and relevant staff

The focus of this subject inspection was on Junior Cycle Mathematics only.

School context

Coláiste Muire is an all-girls post-primary school located in the town of Ennis. It operates under the trusteeship of the Catholic Education An Irish Schools' Trust. At the time of the inspection there were 997 students enrolled. As well as the Junior Cycle and Leaving Certificate, the school offers an optional Transition Year programme, the Leaving Certificate Applied, the Leaving Certificate Vocational Programme and Level Two Learning Programmes.

Summary of main findings and recommendations:

Findings

- The overall quality of teaching and learning was good with very good practices observed in some lessons.
- A range of assessment strategies was used effectively with scope to further develop the use of formative written feedback on students' work to support learning.
- Rapport with and between students and teachers was very good and students worked in safe and affirming learning atmospheres in all lessons observed.
- Subject provision and whole school support for Mathematics were very good.
- Individual lesson planning ranged from very good to fair with best outcomes and experiences where clear learning intentions framed the lessons.
- All junior cycle mathematics class groups experience team teaching on a regular basis.

Recommendations

- The mathematics teachers should expand the provision of written formative feedback to support students' learning.
- Lesson planning should include more comprehensive in-class discovery tasks for when a second teacher is timetabled.
- The potential of using digital technology to support both learning and teaching should be further explored by teachers and its use incorporated more regularly into lesson planning.

Detailed findings and recommendations

1. Teaching, learning and assessment

- The overall quality of teaching and learning was good.
- All the teachers have the required professional qualifications to teach mathematics and demonstrated very good subject knowledge in the lessons observed. Effective and highly effectice teaching practices were observed in the majority of lessons. There was scope for improvement in a small number of lessons which focused on completing tasks without checking sufficiently on students' understanding and progress.
- The overall quality of learning was good. Student experiences and outcomes were best in the lessons where expectations for prior knowledge and ability were suitably high and tasks were set accordingly. Where tasks allowed, students worked well collaboratively and enjoyed the interactions which provided opportunitites for them to explain, discuss and justify their findings while using the key terminology in context. There was scope for providing more opportunities for purposeful active engagement with the topic in lessons where teacher explanation was a main feature.
- A range of assessment strategies was observed with improvement needed in some areas. Very good use of questioning was observed in some lessons. The teachers who used a broad range of global, targeted, higher and lower order questioning had a better understanding of students progress and learning needs than those who relied mainly on volunteer and lower order responses.
- Verbal feedback was provided regularly to students and some written feedback on work was observed, both for online and paperbased work or tests. However, there is a need to expand the practice of providing written feedback. As well as affirming what is done well, students would benefit from more written guidance to help them identify areas in need of improvement with suggested means of how best to make improvements.
- Homework was assigned regularly and corrected in class. Teachers should consider the value of getting students to compare and discuss their homework to facilitate peer learning and provide opportunities for them to see other ways of working. In one lesson, digital technologies were used optimally to support learning from homework. Students submitted photographs of their homework to the teacher. This was used to focus homework correction to ensure areas in need of attention were addressed.
- All junior cycle mathematics classes had a second mathematics teacher assigned for some lessons each week. The teachers reported it to be a very valuable resource and appreciated the opportunities it provided for professional collaboration. The very detailed information around individuals' learning needs was readily available and widely known by all the teachers. Lesson planning and reflection should focus on the quality of support provided to indiviuals with additional needs and the added value afforded by the second teacher to incorporate more discovery learning opportunities.

2. Subject provision and whole school support

- Subject provision and whole school support for Mathematics were very good.
- Students are taught in mixed ability settings until 3rd year and are supported to remain at the highest level for as long as possible.
- Mathematics classes are distributed well across the week and are timetabled to be in mathematics specific classrooms where possible. These rooms have displays supporting numeracy development as well as specific resources to enhance teaching and learning of mathematics.
- Every effort is made to ensure that the second teacher assigned to support in mathematics lessons is a qualified mathematics teacher. This is highly commendable.
- Management support and encourage engagement with extra-curricular events which help develop numeracy skills. The mathematics teachers ensure the students have many of opportunities to be involved in mathematics outside the classroom, both for in-school and external events.

- The board of management supports and encourages engagement with professional development and the mathematics teachers avail of both whole-school and mathematics specific professional learning opportunities.

3. Planning and preparation

- Individual lesson planning was good overall. The most effective lessons had clear learning intentions and differentiated tasks were planned which ensured all students had purposeful engagement with the lesson content and made progress with their learning. In some lessons, the teachers intervened too quickly or continued to instruct as students were working on the tasks.
- In a few of the lessons observed, digital technology was incorporated well to support teaching and learning. It was used to display student work as exemplars, to share material which could be accessed at home by the students and to display the work of the lessons. Teachers should explore its potential to incorporate more interactive examples, to display accurate diagrams and to show the variety of ways which correct answers can be arrived at. This can be done using student exemplars and pre-prepared or sourced examples.
- Planning to maximise the potential of the second teacher to support learning should be a focus area for development by the department and the teachers involved. When the teachers reflect on the effectiveness of this resource, they should focus on evaluating the added value for students in terms of their learning experiences and outcomes, especially for the students requiring additional support. The students reported that having a second teacher in the lesson was beneficial to their learning.
- Highly effective practices around junior cycle implementation were noted. Subject learning and assessment review (SLAR) meetings were well documented and findings were used for future planning. Feedback from students was also sought and findings used to make improvements. Both teachers and students spoke favourably about the learning experiences provided by the classroom-based assessments (CBAs).

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.

Appendix

SCHOOL RESPONSE TO THE REPORT

Submitted by the Board of Management

Part A Observations on the content of the inspection report

Colaiste Muire Board of Management welcomes the Maths Inspection and welcomes the affirmation of effective practice evident throughout the report namely:

- The quality of teaching and learning
- The very good practices observed
- The wide range of in class assessment strategies
- The safe and affirming learning atmosphere for students and the very good rapport observed between staff and teachers.
- The very good whole school support and subject provision for Maths.

Part B Follow-up actions planned or undertaken since the completion of the inspection activity to implement the findings and recommendations of the inspection.

The Board equally welcomes the recommendations outlined in the report and is committed to ongoing improvement. The Maths department will continue to work collaboratively to plan lessons incorporating the use of written formative feedback.

The area of Team Teaching will be further explored and developed to include discovery tasks in all classes.

The use of practical technology will be further developed to support Teaching and Learning in lessons and planning.

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
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 *very good* 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;