

An Roinn Oideachais agus Scileanna
Department of Education and Skills

Subject Inspection in Mathematics

REPORT

Ainm na scoile / School name	Scoil Mhuire
Seoladh na scoile / School address	Greenhill Carrick-On-Suir Co Tipperary
Uimhir rolla / Roll number	65280A

Date of Inspection: 05-04-2019



**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 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.

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.

INSPECTION ACTIVITIES

Dates of inspection	4 and 5 April 2019
Inspection activities undertaken <ul style="list-style-type: none">• Review of relevant documents• Discussion with principal and key staff• Interaction with students	<ul style="list-style-type: none">• Observation of teaching and learning during six class periods• Examination of students' work• Feedback to principal and relevant staff

School context

Scoil Mhuire is an all-girls voluntary secondary school operating under the trusteeship of Catholic Education An Irish Schools Trust (CEIST). The school offers the Junior Cycle, an optional Transition Year (TY) programme, the Leaving Certificate Vocational Programme (LCVP), and the Leaving Certificate (Established) (LCE). It has a current enrolment of 432 students.

SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

Findings

- The overall quality of teaching, learning, and assessment is very good; much excellent practice was observed that would be beneficial to share at department and whole-school level.
- Students received high quality formative feedback in all lessons, with innovative practice around project work noted in TY.
- The quality of subject provision and whole school support is very good; the introduction of team-teaching as another mode of support for students with special educational needs (SEN) is very positive.
- School self-evaluation (SSE) processes support the continuing development of teaching practice in the department.
- The overall quality of planning and preparation is very good; there is a systematic process in place for the sharing of resources which is assisted by the targets set in the school's Digital Learning Plan.

Recommendations

- The department should develop an action plan outlining how it will ensure that students experience consistently very good practice over the coming years through the sharing of the variety of very good and excellent practices outlined in this report; peer observation should form part of this plan.

DETAILED FINDINGS AND RECOMMENDATIONS

1. TEACHING, LEARNING, AND ASSESSMENT

- The overall quality of teaching, learning and assessment is very good; excellent practice that gave students the opportunity to understand the nature of Mathematics was also observed. Approaches were engaging and varied, and many lessons gave students the opportunity to discover, to hypothesise, and to justify conclusions reached. All lessons had a relaxed but purposeful atmosphere that allowed students to be comfortable in participating.
- While lessons featured a variety of styles and approaches, the setting of high expectations for all students' achievement and participation was common to all. Students were supported in reaching these high expectations through teachers' clear articulation of the learning intentions. In addition, teachers were explicit regarding students' behaviour and participation in lessons, both as individuals and during collaborative tasks. Additionally, many resources used and tasks set had entry-points that enabled students of all abilities to participate, and allowed scope for students to set their own appropriate pace. This further encouraged and supported students to strive for standards of excellence, regardless of their level of ability.
- In all lessons, highly effective questioning was observed. Students were encouraged to expand on answers, to use subject-specific terminology, and to clearly verbalise their reasoning.
- Very effective collaborative learning was a feature of almost all lessons. Where practice was excellent, teachers communicated the expectations for the outcome of tasks very clearly. It was evident that students understood the standards expected of them as they related to both content development and skill development.
- In one very effective lesson on the geometry of the circle, students had the opportunity, through a very well scaffolded task that was presented in a real-life context, to develop all-new learning themselves, based on their prior knowledge relating to geometry of the line. Students in this lesson were confident as learners, were highly engaged in learning, and understood the benefit to be derived from collaborating together. At the end of the lesson, this learning was very effectively consolidated by the teacher, in partnership with the students. This brought the necessary mathematical rigour to the students' understanding. It was evident that the creation of this environment, where all students had very high-quality learning outcomes, was developed over a sustained period of time where both content and skill development went hand-in-hand. It would be very beneficial for this type of approach to be shared at both department and whole-school level.
- Highly effective team-teaching was observed. Students were expected to be working at all times, and through the use of mini whiteboards combined with very effective group work, all students were able to participate. The development of content was based on student-gathered data, again building students' confidence in their own ability.
- Students received high quality formative feedback in all lessons. There is opportunity now to consider how students themselves are enabled to become skilled in formative feedback, particularly given the introduction of classroom-based assessments in Junior Cycle.

- Teachers used subject-specific software and other digital technologies in a way that was interesting, supported learning, and increased students' overall understanding.

2. SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- The quality of subject provision and whole school support is very good. Senior management is very supportive of the department. Students are taught in mixed-ability classes in first year and in TY, which is very positive. In all other year groups, classes are streamed and concurrently timetabled. This allows students access to all levels of the course, as appropriate.
- Support for students with SEN is very good and many modes of support are in operation. Team teaching has been introduced as another strategy to support these students. It is positive that teachers have availed of training in this regard and are feeding their learning back to senior management.
- The department has a keen awareness of, and is using, the classroom-based strategies identified in the school self-evaluation plan to improve classroom practice. Included among these are the use of "show-me" boards, the school's "Give Me 5" strategy, and the inclusion of peer-assessment and self-assessment during lessons.
- The mathematics department has deployed several effective strategies to raise awareness and interest in the subject across the school. Some directly target student numeracy skills, such as the weekly Maths Challenge.

3. PLANNING AND PREPARATION

- The overall quality of planning and preparation is very good. Very good individual planning and preparation, that allowed students to be the main contributors to the development of new learning, was observed in almost all lessons. All lessons were carefully planned to address the learning intentions as communicated to the students.
- Departmental planning is thorough and details common approaches to be used. There is a systematic process in place for the sharing of resources which is also being assisted by the school's Digital Learning Plan. There is a detailed modular plan for TY that is in keeping with the spirit and ethos of the TY programme; very effective, innovative practice around project work and assessment are included as part of this module.
- It is recommended that the department develops an action plan outlining how it will ensure that students experience consistently very good practice over the coming years through the sharing of the variety of very good and excellent practices observed throughout the inspection. Parts of this plan may consist of the setting of specific, measurable, attainable, realistic and time-bound (SMART) targets around: strategies for the further embedding of very good practice supporting the development of formative feedback skills, taking cognisance of the Junior Cycle specification; the sharing of expertise and experience through, for example, the addition of teaching and learning as an item on the subject meeting agenda; and, most beneficially, peer observation.

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.

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
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 <i>very good</i> 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;

Appendix

SCHOOL RESPONSE TO THE REPORT

Submitted by the Board of Management

Part A Observations on the content of the inspection report

The Board of Management is pleased that all the requirements under Child Protection were met.

The Board is extremely pleased with all the findings under the headings:

- Quality of teaching, learning and assessment,
- Formative feedback and innovative practice
- Subject provision
- School self-evaluation processes and
- Quality of planning and preparation.

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 school is currently planning to continue and further develop the practice of team teaching in the maths department, and to extend the practice to other areas.

School management will encourage and facilitate peer observation at every opportunity both through the Droichead process and for more established teachers.

Teaching and learning will be placed formally on the subject meeting agenda.