An Roinn Oideachais agus Scileanna Department of Education and Skills

Subject Inspection in Mathematics

REPORT

Ainm na scoile / School name	Castlerea Community School
Seoladh na scoile / School address	Castlerea Co. Roscommon
Uimhir rolla / Roll number	91493P

Date of Inspection: 15-03-2017



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.

Subject Inspection

INSPECTION ACTIVITIES DURING THIS INSPECTION

Dates of inspection	14-03-2017 and 15-03-2017
 Inspection activities undertaken Review of relevant documents Discussion with principal, deputy principal and key staff Interaction with students 	 Observation of teaching and learning during seven class periods Examination of students' work Feedback to principal and relevant staff

SCHOOL CONTEXT

Castlerea Community School is a co-educational post-primary school operating under the joint auspices of the Sisters of Mercy and the Galway and Roscommon Education and Training Board. The programmes offered are the Junior Certificate, the Leaving Certificate Vocational Programme, the Leaving Certificate Applied Programme and the established Leaving Certificate. Due to insufficient demand, the school's Transition Year is not running in the current academic year. Enrolment currently stands at 340 students.

SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

FINDINGS

- The standard of teaching was good or very good in all of the lessons observed with some exemplary practices noted; there was scope in some lessons to increase the level of challenge for the more able students.
- The judicious integration of supporting resources, including information and communications technology (ICT) was achieved successfully in lessons.
- Good or very good student learning was evident in all of the lessons observed; assessment for learning (AfL) is an area for development in some cases.
- Subject provision and whole-school support for Mathematics is very good.
- Planning and preparation for Mathematics is of a good standard with scope for the further development of short-term schemes of work.

RECOMMENDATIONS

- The repertoire of differentiation and AfL strategies in use in lessons should be expanded.
- Schemes of work should be further enhanced through the tailoring of resources, methodologies and assessment modes to groups of learning outcomes.

DETAILED FINDINGS AND RECOMMENDATIONS

1. TEACHING AND LEARNING

- Good or very good teaching was observed in all lessons with some exemplary practices noted.
 Orderly, respectful and inclusive learning environments have been created by teachers and all lessons were delivered with high levels of enthusiasm.
- All of the lessons observed were well planned. Careful attention was paid, in most lessons, to
 ensuring that the lesson content was sufficiently differentiated to cater for the range of
 abilities in the class. This was achieved through the use of carefully planned group activities,
 the incorporation of worksheets containing an incremental level of challenge and the use of
 directed questioning. In a minority of lessons, there was scope to increase the level of
 challenge for the more able students.
- In all lessons, resources to assist in the delivery of the lesson were prepared in advance. ICT
 was used to good effect in most of the lessons observed and was particularly effective in
 facilitating good progress through the lesson content by, for example, demonstrating
 constructions in geometry, comparing graphical representations of data and demonstrating
 calculator functions using an emulator.
- The quality of student learning was good or very good in all of the lessons observed. Of particular note was the ability of students to work both independently and collaboratively, on a range of higher-order tasks, in a purposeful and productive manner.
- In most of the lessons observed, the AfL strategy of sharing learning intentions was used to provide students with a focus for their learning. The assessment of students' attainment of these learning intentions was achieved primarily through observation and questioning by the teacher. In some cases, the use of additional AfL strategies such as peer assessment and brainstorming should be adopted in order to give students more ownership and responsibility for their learning.
- In all of the classrooms visited, Mathematics was celebrated through the display of a variety of mathematics-related resources including posters, diagrams, key terminology and visualisation aids. In a number of cases, these resources were referred to during lessons.

2. SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- Subject provision and whole-school support for Mathematics is very good. Timetable provision for Mathematics is in line with syllabus requirements in all year groups and there is a generous allocation of six periods per week for senior-cycle students.
- First-year 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.
- Students requiring additional numeracy support are catered for using a combination of
 individual and small-group withdrawal. In addition to this, the generous allocation of teaching
 resources to Mathematics ensures that class sizes are small in general. This allows more
 focussed support to be given to all students.
- More able students have opportunities to extend their learning outside of the classroom through participation in a variety of mathematics-related events and competitions. In addition to this, the use of internet-based ICT resources in many of the lessons observed facilitates students in consolidating and extending their learning in their own time.

• The mathematics department is very well resourced. All teachers have a designated base classroom, each equipped with a data projector and a desktop computer. A range of additional resources, including subject-specific software, is available for use in lessons.

3. PLANNING AND PREPARATION

- Planning and preparation in Mathematics has reached a good standard. The mathematics
 department is co-ordinated on a rotating basis in line with good practice. A subject plan has
 been developed collaboratively and provides a good overview of how the subject is provided
 for in the school.
- Schemes of work for each year group and for each level of study have been developed and
 are laid out in tabular format. An area for development in these schemes of work is the
 adoption of a more tailored approach to the documenting of resources, methodologies and
 assessment modes to be used in conjunction with each group of learning outcomes.
- It is clear that teachers recognise the importance of developing a team approach and have adopted common schemes of work where feasible. In almost all cases this has led to the administering of common summative assessments at the end of each term. This good practice fosters a considerable level of consistency for students while minimising unnecessary duplication of effort among the members of the mathematics team.
- Teachers conduct an annual analysis of students' performance in the certificate examinations.
 The results of this analysis should be used to develop a clear action plan to build on strengths and to address any weaknesses that may be identified.

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 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.

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 of Castlerea Community School is delighted with the outcome of the recent Maths Department inspection, where good and very good teaching and learning was observed in all lessons and some exemplary practices noted. The Board acknowledges the individual and collaborative work of the Maths Department teachers and their dedication in celebrating Maths in the school.

As a board, we endorse the school's endeavour to maintain the excellent resources available to the Maths department, which enables smaller class sizes, opportunities for students to extend their learning beyond the classroom and support those in need of extra support.

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 will take on board the recommendations of this inspection report and are currently planning on the expansion of differentiation and AFL strategies as part of its School Self Evaluation process. Schemes of work will continue to be developed further to include current and planned methodologies and practices to support learning outcomes for students.

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
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 wholeschool 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;