

An Roinn Oideachais agus Scileanna
Department of Education and Skills

Subject Inspection in Mathematics

REPORT

Ainm na scoile / School name	Grange Post Primary School
Seoladh na scoile / School address	Grange Co Sligo
Uimhir rolla / Roll number	72330D

Date of Inspection: 05-10-2016



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

Date of inspection	05-10-2016
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 five class periods• Examination of students' work• Feedback to principal, deputy principal and relevant staff

SCHOOL CONTEXT

Grange Post-Primary School is a co-educational school operating under the auspices of the Mayo, Sligo and Leitrim Education and Training Board. The programmes offered are the Junior Certificate, an optional Transition Year (TY), the Leaving Certificate Vocational Programme and the established Leaving Certificate. Enrolment has grown substantially in recent years and currently stands at 206 students.

SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

FINDINGS

- A very good standard of learning and teaching was observed in all lessons with some exemplary practices noted.
- Students' active engagement as well as a student-centred approach to assessment are key elements of the approach used in lessons.
- Subject provision and whole-school support for Mathematics is very good.
- The continuing professional development (CPD) programme for teachers is carefully planned and is targeted towards inputs that will enhance students' learning.
- Teachers have developed very good practices in relation to planning and preparation for learning and teaching.
- Management and staff have engaged meaningfully and productively with school self-evaluation (SSE).

RECOMMENDATIONS

- In further developing the TY plan for Mathematics, an explicit project-based element should be included.

DETAILED FINDINGS AND RECOMMENDATIONS

1. TEACHING AND LEARNING

- The standard of learning and teaching was very good in all of the lessons observed with some exemplary practices noted. Teachers demonstrated very high levels of subject expertise as well as an in-depth understanding of how to optimise students' learning.
- Students' active engagement with the lesson content was central to the methodology used in all lessons. There was a laudable focus on developing students' conceptual understanding rather than overly focusing on procedure. Students responded with enthusiasm in all lessons and demonstrated a high degree of comfort in discussing mathematical concepts and in working with their peers.
- There was a very high level of consistency observed in relation to lesson structure. Learning intentions were used to give students a focus for the lesson in all cases. Commendably, these learning intentions were revisited at the end of lessons to reinforce the content covered and the skills developed.
- The use of assessment for learning (AfL) was a key feature of all lessons. In most lessons, students were required to reflect on their learning both at the beginning of the lesson and once the lesson had concluded. The use of mini-whiteboards in some lessons facilitated efficient progress through the lesson content and allowed the teacher to gain a clear overview of the level of achievement in the class.
- A team-teaching approach was observed in two lessons and in each case, the model of team teaching adopted was chosen to meet the needs of the particular cohort of students. High levels of planning and co-operation were evident in each of these lessons and students were very well supported in their learning.
- Information and communications technology (ICT) was used in all of the lessons observed to frame and scaffold the lesson content. Teachers demonstrated very high levels of confidence and competence in using the available technology.
- Teachers have created stimulating learning environments for students and all classrooms are very well maintained. Relevant content is on display in all classrooms and a numeracy board is on prominent display in the school corridor.
- All of the lessons observed were conducted in an atmosphere of mutual respect and all interactions between students and teachers were positive and constructive.

2. SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- Subject provision and whole-school support for Mathematics is very good. Timetable provision is in line with syllabus requirements in all year groups and there is a generous provision of six periods per week for fifth-year and sixth-year students.
- First-year and TY students are taught in a mixed-ability setting in line with best practice. In second year, students remain in a mixed-ability setting until at least the October mid-term, at which point they are divided into level-specific classes. Concurrent timetabling in subsequent years facilitates the movement of students between levels where necessary.
- A range of supports is in place for students who are experiencing difficulty with numeracy. Small class groups and team teaching as well as one-to-one and small-group withdrawal, where required, are among the supports currently available to students. A homework club is

also offered by teachers on a voluntary basis and is availed of by a significant number of students.

- The teachers of Mathematics have a very good qualifications profile. All of the teachers satisfy the requirements of the Teaching Council for the teaching of Mathematics and all have engaged in a comprehensive CPD programme. Commendably, full details of the CPD that has been undertaken by teachers is recorded in the subject-planning documentation.
- The focus of recent whole-staff CPD has been in the area of AfL and the positive results of this engagement were highly evident during lesson observations. The next area of focus will be in the area of formative assessment. School management and staff are commended for their thoughtful approach to CPD and for keeping the needs of students central to the programme.

3. PLANNING AND PREPARATION

- The standard of planning and preparation for Mathematics is very good. A comprehensive subject plan has been developed collaboratively, containing a wealth of information on how the subject is provided for in the school, while also offering guidance for teachers in relation to good practices in the teaching of Mathematics.
- The minutes of subject-department meetings are retained with the subject planning documentation. As well as the necessary operational focus of these meetings, it is noted that considerable discussion has taken place in relation to common approaches to be used by all teachers of Mathematics. This is very good practice.
- Schemes of work for each year group and for each level of study are laid out in tabular format and are stated in terms of learning outcomes. As a means of further streamlining the sharing of ideas among teachers, the schemes of work should be used as a focal point for cataloguing the vast array of resources, methodologies and assessment modes that are in use by the teachers of Mathematics.
- The TY scheme of work is well developed and contains a good variety of topics. The explicit inclusion of a project-based element is recommended as a means of further developing students' organisational, investigative and collaborative skills.
- Engagement with SSE is at a very high level in the school. SMART (specific, measurable, achievable, realistic and time-bound) targets have been set in relation to literacy and numeracy as well as to teaching and learning in a broader context. The attainment of these targets is driven by a number of key actions and initiatives, some of which are the responsibility of individual teachers and some of which have a whole-school dimension.

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 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.

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. Overall, learners have access to a basic level of provision. 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

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