

An Roinn Oideachais agus Scileanna

Department of Education and Skills

**Subject Inspection of Mathematics
REPORT**

**Portumna Community School
Portumna, County Galway
Roll number: 914130**

Date of inspection: 27 January 2015



**A N R O I N N | D E P A R T M E N T O F
O I D E A C H A I S | E D U C A T I O N
A G U S S C I L E A N N A | A N D S K I L L S**

**REPORT
ON
THE QUALITY OF LEARNING AND TEACHING IN MATHEMATICS**

INFORMATION ON THE INSPECTION

Dates of inspection	26 and 27 January 2015
Inspection activities undertaken <ul style="list-style-type: none">• Review of relevant documents• Discussion with principal and teachers• Interaction with students	<ul style="list-style-type: none">• Observation of teaching and learning during ten class periods• Examination of students' work• Feedback to principal and teachers

MAIN FINDINGS

- Good quality learning and teaching was observed in all lessons with some very good practices also noted.
- Students demonstrated positive dispositions towards Mathematics and participated well in lessons.
- Timetable provision is largely in line with syllabus requirements but the allocation for first year falls short of the recommended one lesson per day.
- Teachers of Mathematics are very well qualified and demonstrate a strong commitment to continuing professional development (CPD).
- Teachers have a reflective and collaborative approach to subject planning.
- Planning for the integration of *Project Maths* is ongoing and developing.

MAIN RECOMMENDATIONS

- In planning for lessons, teachers should aim to incorporate a greater balance between teacher presentation and students' active participation.
 - The amount of time allocated to the teaching of Mathematics in first year should be increased.
 - Schemes of work should be further developed to include more detail in relation to resources, methodologies and assessment modes.
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INTRODUCTION

Portumna Community School is a co-educational school operating under the joint trusteeship of the Galway and Roscommon Education and Training Board (ETB) and the diocese of Clonfert. The programmes offered are the Junior Certificate, an optional Transition Year (TY), the Leaving Certificate Applied (LCA) programme, the Leaving Certificate Vocational Programme (LCVP) and the established Leaving Certificate. Enrolment currently stands at 421 students.

TEACHING AND LEARNING

- Good quality learning and teaching was observed in all lessons with some very good practices also noted. Teachers demonstrated high levels of subject expertise and were positive and supportive in their interactions with students.
- Students demonstrated good evidence of prior learning and participated enthusiastically in lesson activities when required. In the majority of lessons there was scope to reduce the amount of time given to teacher presentation in favour of more student activity, both individual and collaborative. In particular, the further framing of activities using a discovery approach is encouraged.
- Information and communication technology (ICT) was used in the majority of lessons to support teachers' presentations and to structure the lesson content. Some very good use was made of specialist software packages that facilitated the clear demonstration of concepts and led to good progress through lessons.
- There was some good use of differentiated questioning strategies in lessons and teachers are skilled at framing questions in a way that takes account of the range of abilities in the class. For some of the in-class activities, differentiation could be further facilitated through the incorporation of an incremental level of challenge that would allow all students to achieve while providing sufficient challenge for the more able students.
- In the majority of lessons the intended learning outcomes were shared with students at the outset and in some cases were revisited at the end of the lesson. In other lessons, the incorporation of some time for a recapitulation of the lesson content would have been beneficial.
- Most of the lessons observed featured the correction of homework and an examination of a sample of students' copybooks indicates that homework is assigned regularly. Students' work is well monitored in general.
- Teachers have created stimulating learning environments for students. Most classrooms feature a variety of subject-specific content and in some cases, students' own work is on display in classrooms. In some of the lessons observed, this content was referred to during lessons in order to further clarify the concept being covered. The inclusion of a number line in each classroom would be a further welcome addition.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- Management is very supportive of the mathematics department. There is generous timetable provision for senior-cycle Mathematics, particularly for fifth and sixth year higher level class groups. Junior cycle provision is in line with syllabus requirements in all but first year where provision falls short of the one lesson per day recommended in

Circular 0058/2011 and Circular 0025/2012. It is therefore recommended that this provision be increased.

- First-year and TY students are taught in mixed-ability settings 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.
- Teachers of Mathematics have a very good qualifications profile. Most of the teachers have specialist qualifications in Mathematics and two teachers are currently undertaking a professional diploma in Mathematics for teaching through the University of Limerick. All of the teachers have attended the workshops provided as part of the national roll-out of *Project Maths*.
- Students have access to a variety of competitions such as the Young Scientist and Technology exhibition and the Irish Mathematical Olympiad. Such competitions allow students to extend their learning outside of the classroom setting and the school has had considerable success recently in such competitions. Students in need of additional support in the area of numeracy are catered for primarily through individual withdrawal from lessons and there are good systems in place for the recording of supports and the dissemination of relevant information to the wider body of staff. It is suggested that team teaching be considered as an alternative and more inclusive form of provision for some students.
- The mathematics department is well resourced. All classrooms are equipped with a data projector and space is made available on the school server for the saving and sharing of teaching and learning resources. Teachers of Mathematics have also experimented with other means of sharing resources online and this is a very positive development.
- Management conducts an annual analysis of students' performance in the certificate examinations and this analysis is discussed at subject department level. Details of these discussions should be recorded and a concise action plan should be drawn up to build on identified strengths and to address any weaknesses that may be identified.

PLANNING AND PREPARATION

- Planning for Mathematics is ongoing and schemes of work for each year group and for each level have been developed and are stated in terms of learning outcomes. A notable feature of these schemes of work is the inclusion of a notes section in which teachers continually reflect on their practice. This allows teachers to refine their schemes of work in an informed manner on a regular basis and is highly commended. Work has begun in relation to the sharing of teacher reflections in an online forum and this is strongly encouraged. As *Project Maths* continues to become embedded in practice, more detail in relation to resources, methodologies and assessment modes should be added to schemes of work.
- The mathematics department is co-ordinated by a senior member of the team. Department meetings, both formal and informal are held regularly throughout the year and the minutes of these meetings are retained in the subject planning folder. These minutes provide evidence of a department that works well together with duties disseminated equitably among the group.
- Individual planning for lessons was of a very high standard. Supplementary resources, including ICT, were sourced in advance and were integrated seamlessly into lessons.

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 on the findings and recommendations of the report; the board chose to accept the report without response.