

An Roinn Oideachais agus Scileanna

Department of Education and Skills

**Subject Inspection of Mathematics
REPORT**

**Saint Caimin's Community School
Shannon, County Clare
Roll number: 91447I**

Date of inspection: 11 March 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	9 and 11 March 2015
Inspection activities undertaken <ul style="list-style-type: none">• Review of relevant documents• Discussion with principal, deputy principal and teachers• Interaction with students	<ul style="list-style-type: none">• Observation of teaching and learning during nine class periods• Examination of students' work• Feedback to principal, deputy principal and teachers

MAIN FINDINGS

- The standard of teaching and learning ranged from good to very good in the lessons observed with very good practice predominant.
- Consistency in lesson structure combined with a variety of teaching methodologies ensures high levels of student engagement with their learning.
- Management provides very good support to the mathematics department.
- Teachers of Mathematics are very well qualified and demonstrate a strong commitment to continuing professional development (CPD).
- Collaborative planning for Mathematics is at an advanced stage with scope for the further development of short-term schemes of work.

MAIN RECOMMENDATIONS

- The very good work that is ongoing in relation to resource development should be reflected in schemes of work and should be combined with further detail in relation to methodologies and assessment modes.
-

INTRODUCTION

St Caimin's Community School is a co-educational school operating under the trusteeship of the Bishop of Killaloe, the Sisters of Mercy and the Limerick and Clare Education and Training Board (ETB). The school provides all programmes including an optional Transition Year (TY). Enrolment currently stands at 709 students.

TEACHING AND LEARNING

- The standard of teaching and learning ranged from good to very good in the lessons observed with very good practice predominant. Teachers demonstrated high levels of confidence and competence in their lesson delivery and a strong commitment to the implementation of *Project Maths* methodologies was evident.
- The elicitation of students' prior knowledge as a basis for further learning was a key feature of most lessons and allowed teachers to tailor the lesson content very effectively. The use of brainstorming combined with higher-order questioning strategies and an appropriate amount of wait-time was particularly effective in this regard.
- Lessons were very well structured in general. In most cases, the desired learning outcomes were shared with students at the outset and these learning outcomes were revisited at the end of lessons.
- There was a high degree consistency observed in the approaches taken by teachers to common mathematical procedures and appropriate mathematical routines were used in all lessons.
- There were some very good examples evident of carefully prepared activities that were designed to optimise student engagement and to progress students' learning. In most cases, these activities delivered high-quality collaboration between students and contained sufficient challenge for all students in the class. In a small minority of lessons, learning would have benefited from the inclusion of more student activity, either individual or collaborative.
- In a number of classrooms, the seating arrangements have been adapted to facilitate high-quality interaction between students during lesson activities. Such arrangements were observed to be working very effectively in lessons.
- Team teaching was used to very good effect in one lesson. The approach adopted involves one teacher taking a lead role in the delivery of the lesson content while the second teacher assists in providing focussed support to individual groups of students.
- Peer assessment was used to very good effect in some lessons as a means of ensuring good progress through the homework exercises and allowing students to focus their attention on areas of difficulty.
- Information and communication technology (ICT) was used in almost all of the lessons observed. Particularly effective use was made of graphing software to demonstrate concepts efficiently and thus to facilitate good progress through the lesson content.
- In all of the lessons observed, the working environment was relaxed and conducive to learning. Teachers have developed very good working relationships with students and all interactions were respectful and constructive.

- It is commendable that, where feasible, classrooms contain a considerable amount of mathematical content including posters, keywords, constructions and word-plays. The development of this print-rich environment began as a *Maths Week* initiative and is in line with the school's numeracy strategy which has been developed as part of the school self-evaluation process.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- Senior management provides very good support to the mathematics department. A variety of resources, including ICT, has been made available for use in lessons. Involvement with subject associations is supported and attendance at CPD events is facilitated for all teachers.
- Timetabling for Mathematics is in line with syllabus requirements. Most students have daily contact with the subject and there is a good balance between morning and afternoon lessons. Teachers also demonstrate high levels of volunteerism by providing additional tuition outside of regular class time as and when a need is identified.
- First-year and TY 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. The allocation of students to particular levels is consultative and well informed. Recently, an additional higher-level class group has been created at junior cycle. This is part of a whole-school initiative to encourage students to study at the highest achievable level.
- The teachers of Mathematics have a very good qualifications profile. Most have specialist qualifications in Mathematics and some have engaged in a variety of further study. All teachers have attended the workshops provided as part of the national roll out of *Project Maths* and some teachers have also attended additional workshops in their own time. Such commitment to CPD is highly commended.
- Students in need of additional numeracy support are catered for primarily through the facilitation of smaller class groups. The LCA programme is a good option for a cohort of senior cycle students and the provision of team teaching for this group is commended. Exceptionally able students have access to a range of extra-curricular activities related to Mathematics including a variety of quizzes and other competitions.

PLANNING AND PREPARATION

- The mathematics department is co-ordinated on a rotating basis in line with good practice. Department meetings are held regularly throughout the year and the minutes of these meetings are retained in the subject planning folder. These minutes present evidence of a department that works well, with responsibilities disseminated among the group.
- Subject department planning is well established in the school. A subject plan for Mathematics is in place and this plan is reviewed regularly. Of particular note is the ongoing work in relation to the development of cross-curricular and extra-curricular numeracy links.
- The use of the school server for the sharing of resources is common practice. Many teachers also use an online platform for the sharing of resources with students. Such

practice encourages continual interaction between students and the subject outside of class time and is highly commended.

- Schemes of work have been developed for each year group and for each level of study. These schemes of work are laid out in tabular format and are stated in terms of learning outcomes. They also contain detail in relation to timeframes and key terminology. Particularly commendable is the inclusion of an end-of-year review in which teachers reflect on what has gone well and any particular areas for further development that have been identified. Future development of schemes of work should include more detail in relation to teaching methodologies, resources and assessment modes.
- The TY plan contains a good mix of content and activities. The plan also includes a broadened view of assessment in which verbal reasoning and group discussion are key components.

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.

Appendix

SCHOOL RESPONSE TO THE REPORT

Submitted by the Board of Management

Area 1 Observations on the content of the inspection report

The Board of Management and Staff of St. Caimin's Community School welcome the positive nature of this report. It reflects the professionalism and dynamics of the school's Math's department. It acknowledges that teaching and learning is of a high standard, that teachers are well qualified, committed to CPD and have a strong commitment to Project Maths methodologies. The report also notes that there are effective supports in place for students with special educational needs.

Area 2 Follow-up actions planned or undertaken since the completion of the inspection activity to implement the findings and recommendations of the inspection.

The Maths department having reviewed the Inspectors report are currently working on the recommendations. Resources: The Maths department individually and collectively store their resources on the school Central Resource Library. Links to relevant resources will be included in both the long and short term schemes of work.

More detail in relation to methodologies and assessment modes are to be included in the schemes of work and sharing of expertise and good practice is to form a greater part of subject planning meetings.