

**An Roinn Oideachais agus Scileanna**  
**Department of Education and Skills**

**Subject Inspection in Mathematics**

**REPORT**

<b>Ainm na scoile / School name</b>	Saint Clare's Comprehensive School
<b>Seoladh na scoile / School address</b>	Manorhamilton County Leitrim
<b>Uimhir rolla / Roll number</b>	81013P

**Date of Inspection: 29-11-2016**

**Date of issue of report: 07-02-2017**



### **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.

The board of management 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.

## Subject Inspection

### INSPECTION ACTIVITIES DURING THIS INSPECTION

<b>Date(s) of inspection</b>	29-11-2016
<b>Inspection activities undertaken</b> <ul style="list-style-type: none"><li>• Review of relevant documents</li><li>• Discussion with principal and key staff</li><li>• Interaction with students</li></ul>	<ul style="list-style-type: none"><li>• Observation of teaching and learning during six class periods</li><li>• Examination of students' work</li><li>• Feedback to principal and relevant staff</li></ul>

### SCHOOL CONTEXT

Saint Clare's Comprehensive is a co-educational school with 502 students enrolled currently. The school provides the Junior Certificate, the established Leaving Certificate, and the Leaving Certificate Vocational Programme (LCVP). Transition Year (TY) is an optional programme.

### SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

#### FINDINGS

- The quality of teaching and learning observed during the evaluation was consistently very good.
- All teachers used questioning strategies very well to assess learning.
- There was scope for better use of information and communication technology (ICT) in the lessons observed.
- Students with special educational needs (SEN) are very well supported in Mathematics.
- The mathematics teachers engage in valuable collaboration on lesson planning and sharing resources.
- The Transition Year (TY) mathematics plan is excellent.

#### RECOMMENDATIONS

- Teachers should collaborate on ways to extend the use of ICT and to facilitate more student interaction with ICT in their lessons.
- The mathematics teachers should collaborate around planning for teaching the syllabus learning objectives in their appropriate mathematical contexts by taking account of the links between topics.

### DETAILED FINDINGS AND RECOMMENDATIONS

#### 1. TEACHING AND LEARNING

- The teaching and learning observed were consistently of a very high standard. The high-quality collaboration by the members of the subject department was evident in the use of common approaches and a focus on whole-school initiatives.
- All teachers used questioning strategies very well to assess learning. Higher-order questions were used very effectively to progress students' learning by helping them to explore mathematical concepts in a meaningful way.

- There was a good variety of learning activities prepared for lessons. Some of the activities were better designed than others to engage students. Best practice was observed where the activities facilitated students to discuss Mathematics, to make mistakes and learn from them, and to have fun. It is recommended that more such opportunities be provided for students.
- All classrooms have interactive whiteboards and teachers were observed to use them effectively for electronic presentations, to recall saved material and as visual aids. There was still scope to use ICT in a more creative and interactive way. It is recommended that the teachers collaborate on ways to extend the use of ICT and to facilitate more student interaction with ICT in lessons.
- Some lessons included activities that challenged students appropriately, expecting them to think logically, to understand the underlying concepts, and to discover the Mathematics for themselves. However, there was scope to provide more challenging activities in some lessons, particularly for more-able students.
- Assessment is one of the school's self-evaluation (SSE) themes and very good practice in this area was evident in the lessons observed. For example, the learning intentions were shared with students and were checked as lessons progressed. Feedback that promotes learning and encourages students is provided on tests. Teachers' comments on school reports highlight specific areas for improvement in Mathematics.
- 'Show-me-boards' were used as a valuable tool for including all students in assessment. In one lesson, the students created their own questions as a way of developing deeper understanding of the concepts taught.
- There was very good attention to literacy in all lessons. Best practice in this regard saw teachers use the English meaning of key words to explain mathematical concepts.
- The atmosphere in all classrooms was observed to be warm and relaxed. The teachers provided encouragement and affirmation regularly for students' efforts.

## **2. SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT**

- Mathematics is very well supported at whole-school level. Timetable allocation and the provision of resources to support teaching and learning in Mathematics are very good.
- There is very good practice in relation to assigning students to levels for Mathematics. Students are assigned to mixed-ability classes for first year and levels are set in every other year. There are very effective systems in place to ensure that students study the subject at the highest level possible for as long as possible.
- A range of valuable opportunities is provided for students to participate in extra-curricular mathematics activities.
- Students with SEN are very well supported in Mathematics. The mathematics plan for the unit for students with moderate general learning needs is included in the overall subject plan. Subject teachers teach in the unit and some of the students also participate in mainstream classes.
- The school has chosen 'maintaining high standards' as the theme of the year and there is very good monitoring of student progress in Mathematics. Students complete standardised tests and a mathematics competence test in first year. A comprehensive analysis of student achievement in the certificate examinations is completed against national norms and student intake data. There is an individualised target setting, tracking and monitoring system in place. This level of monitoring is very beneficial in helping students to reach their full potential.

### **3. PLANNING AND PREPARATION**

- The overall quality of planning and preparation is very good. The mathematics teachers work together very effectively to plan for teaching the subject and to share resources. Additionally, they plan some of their lessons collaboratively; to further such excellent practice, it is recommended that they observe each other teach the collaboratively planned lessons and amend them as necessary.
- Good common programmes of work have been developed. However, because the programmes follow the text book, the syllabus is not taught in the connected way that reflects how it is examined. It is recommended that collaboration around planning for teaching the syllabus learning objectives in their appropriate mathematical contexts, and taking account of the links between topics, be undertaken.
- The TY plan is excellent and comprises two project-based modules; one that sees students study geometry through the creation of a truss bridge and another where students complete a statistics project. Through participation in these modules, the students develop their understanding by using mathematical skills in a real-life context.
- Action planning for Mathematics is very well developed and it informs various important aspects of the work of the subject department. The action plans that encourage students to take responsibility for their learning and to set targets for achievement in consultation with their teachers are very good, as are the action plans for effective questioning and common approaches to teaching certain concepts.
- In keeping with good practice, the school's SSE process is reflected in the mathematics plan with the inclusion of the literacy, numeracy and assessment SSE plans. Of particular note is the peer-tuition programme that sees senior students provide peer tuition for junior students. Students volunteer for this initiative and both junior and senior students derive many benefits from their participation.

The draft findings and recommendations arising out of this evaluation were discussed with the principal and subject teachers at the conclusion of the evaluation.

## **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 St. Clare's Comprehensive School welcomes the positive report on Mathematics. The Board commends the teachers of Mathematics on the high standards of 'Learning and Teaching' and planning as mentioned in the report.

**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 Mathematics department has discussed the report and has already engaged in planning for the implementation of the recommendations.

## 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
<b>Very Good</b>	<b>Very good</b> 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 <b>outstanding</b> 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
<b>Good</b>	<b>Good</b> 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
<b>Satisfactory</b>	<b>Satisfactory</b> 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
<b>Fair</b>	<b>Fair</b> 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
<b>Weak</b>	<b>Weak</b> 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;