

An Roinn Oideachais agus Scileanna
Department of Education and Skills

Subject Inspection of Mathematics
REPORT

Skerries Community College
County Dublin
Roll number: 76078Q

Date of inspection: 19 November 2013



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	18, 19 November 2013
Inspection activities undertaken <ul style="list-style-type: none">• Review of relevant documents• Discussion with principal and teachers• Interaction with individual students	<ul style="list-style-type: none">• Observation of teaching and learning during eight lessons• Examination of students' written work

MAIN FINDINGS

- The quality of teaching and learning observed during the evaluation was good, with the majority of lessons very good.
- In almost all lessons, expectations for students' achievement were suitably high and in most lessons, the use of higher-order questions deepened students' understanding; the school achieves good uptake rates at higher level.
- The classroom learning environment was supportive and encouraging, with mutual respect in evidence; students' contributions in lessons indicated that learning was taking place.
- The school operates as a learning community with members of the mathematics team undertaking workshops, additional training programmes or further study in areas of mathematics.
- Co-curricular mathematics activities are correctly seen as important and are promoted well in the school.
- The smooth running of the mathematics department is ensured through the annual appointment of a subject co-ordinator, a budget co-ordinator and a recording secretary.

MAIN RECOMMENDATIONS

- Learning objectives communicated at the start of lessons should be expressed in terms of learning outcomes for students.
 - All lessons should accommodate the range of abilities in the class.
 - Written schemes of work should focus on outcomes for students, link to syllabus strands and include successful resources or methodologies.
 - Reflections on examination attainment data should be documented and help provide a baseline for action planning for improvement.
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INTRODUCTION

Skerries Community College, operating under the auspices of the Dublin and Dún Laoghaire Education and Training Board, has a current enrolment of 911 students. Programmes offered are the Junior Certificate, optional Transition Year, the Leaving Certificate Vocational Programme and the established Leaving Certificate.

TEACHING AND LEARNING

- Overall, the quality of teaching and learning observed was good, with the majority of lessons very good.
- All lessons were purposeful and teachers had prepared well.
- Learning intentions were clear in almost all lessons and communicated to students. Efforts should now be made to express these learning objectives in terms of learning outcomes for students, which will facilitate review of progress.
- In all lessons, there was good use of topic-specific terminology.
- Questioning was correctly balanced between being directed at named students and being open to the class in general. In most lessons, higher-order questions were used to deepen students' understanding and this is very good practice.
- In almost all lessons observed, expectations for students' achievement were suitably high, and led to lessons containing the right level of challenge for students. There was a small number of lessons in which better accommodation of the range of abilities in the class would have benefited students.
- Particular examples of good practice observed included reviewing the learning intention, actively involving students in the lesson, the introduction of a digital video clip, exploiting the potential of the interactive whiteboard and implementing a key words strategy.
- There were two lessons in which the process for deriving specific formulae was explored. This is a very good teaching strategy that fully supports the Project Maths approach.
- Students engaged with the lesson tasks in almost all instances, sometimes with eagerness and enthusiasm. Their contributions in lessons indicated that learning was taking place.
- The classroom learning environment was supportive and encouraging and mutual respect was in evidence.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- The quality of provision and whole-school support for Mathematics is very good.
- Time allocated to Mathematics is good, with five periods per week in first year to fourth year and six periods per week in fifth year and sixth year.
- Currently, some classes have Mathematics on only four days of the week. Every effort should be made in future years to schedule mathematics lessons on each of the five days of the week.

- Students are supported in studying Mathematics at the level most suited to their abilities through a mixture of stand-alone and concurrent timetabling. The good uptake rates at higher level indicate that this strategy is successful.
- Students who find the subject particularly challenging are appropriately identified through the school entry process and generally placed in classes in which they receive targeted support. Additional support is also provided through a numeracy initiative offered to students. It is good practice that all mathematics support is provided by a teacher with expertise in both Mathematics and learning support.
- Teachers are facilitated in attending continuing professional development (CPD) courses and all teachers are up to date with Project Maths workshops. The school's standing as a learning community is enhanced by the fact that two members of the mathematics team have undertaken additional training programmes relevant to Project Maths while another two are currently undertaking further study in mathematics teaching.
- Programmes and levels are rotated appropriately among team members. It is good that three teachers are currently sharing responsibility for the higher level course at Leaving Certificate.
- It is intended to invite a mathematics teacher to join the school's curriculum team as a means of making a more direct link between the whole-school numeracy policy and the mathematics department. This should go ahead as soon as possible.
- There is an understanding within the mathematics team of the importance, for students, of co-curricular mathematics activities such as Maths Week, Irish Mathematical Olympiad and Manga High and these are promoted well in the school.

PLANNING AND PREPARATION

- The quality of planning and preparation in Mathematics is good.
- The smooth running of the mathematics department is ensured through the annual appointment of a subject co-ordinator, a budget co-ordinator and a recording secretary.
- Formal meetings are supplemented with regular informal meetings within the team. Minutes of meetings indicate co-operation and collaboration on areas including planning for literacy and numeracy development, subject self-evaluation and planning for the inclusion of information and communications technology (ICT).
- The subject plan includes schemes of work for all year groups and levels that are presented, in the main, as lists of topics. The team should work on changing the focus of these schemes to outcomes for students. Links to syllabus strands and successful resources or methodologies should also be included in the schemes.
- Some sections of the plan, such as "Teaching Methodologies" and "Assessment for Learning" should be tailored to reflect agreed practice in the mathematics department.
- Data on attainment in Junior and Leaving Certificate examinations is collated in the school and, in line with good practice, included in the plan. The mathematics team should document their reflections on this data and use all of this information as a baseline for action planning for improvement.

- The inclusion, in the plan, of information on co-curricular mathematics activities is good. This, and the activities themselves, would be enhanced with the inclusion of student and teacher evaluation of their benefits.
- Key mathematical words are included in the plan as part of the whole-school literacy policy. This is good practice.

The draft findings and recommendations arising out of this evaluation were discussed with the principal, deputy principal and some of the 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.