

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

**Subject Inspection of Mathematics**  
**REPORT**

**Donabate Community College**  
**County Dublin**  
**Roll number: 761040**

**Date of inspection: 14 September 2011**



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**

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**INFORMATION ON THE INSPECTION**

<b>Dates of inspection</b>	13, 14 September 2011
<b>Inspection activities undertaken</b> <ul style="list-style-type: none"><li>• Review of relevant documents</li><li>• Discussion with principal and teachers</li><li>• Interaction with students</li></ul>	<ul style="list-style-type: none"><li>• Observation of teaching and learning during nine class periods</li><li>• Examination of students' work</li></ul>

**MAIN FINDINGS**

- All teachers were prepared for their teaching and in all lessons the learning objective was clear. There were some good examples of the use of higher-order questions as a means of deepening students' knowledge and understanding.
- Overall, students were suitably challenged by the pace and content of lessons, but in some lessons insufficient progress was made.
- In almost all lessons, the learning environment was positive and supportive of learning.
- There is very good provision and whole-school support for Mathematics. Students have very good access to the different levels of the subject.
- There is a wide range of resources available in the school to support the teaching and learning of Mathematics.
- Subject planning is good and the mathematics team works collaboratively. Significant time and effort has been put into the development of a subject plan and the preparation of resources.

**MAIN RECOMMENDATIONS**

- Project Maths methodologies and approaches should be more widely used in mathematics lessons.
  - Care needs to be taken to ensure that lessons are appropriately challenging, giving all students the opportunity to achieve to their full potential.
  - It is recommended that methodologies and activities tried by teachers in class should be formally shared and discussed at team meetings. Successful ones should be adopted by the team and then integrated into planning documentation.
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## **INTRODUCTION**

Donabate Community College is a co-educational school under the auspices of County Dublin VEC with a current enrolment of 452 students. The school opened in September 2008 and at present has first to fourth year groups. Programmes currently offered are the Junior Certificate and optional Transition Year (TY).

## **TEACHING AND LEARNING**

- Overall, the quality of teaching and learning was quite good.
- All teachers prepared for their teaching and in all lessons the learning objective was clear. In some lessons, students' progress was checked using the traffic lights system, an appropriate assessment for learning strategy. Students fully engaged in the work of the class in almost all lessons.
- There was good use of mathematics terminology in lessons. However, there should be a stronger focus on the development of students' mathematical communication skills.
- Mini-whiteboards used in some lessons provided students with variety in their learning activities. Overall, however, lessons were largely teacher-focused with only a small number of instances of students being actively involved. There was an over-emphasis on studying Mathematics for the certificate examinations.
- There should be an increased focus on Project Maths methodologies and approaches in mathematics lessons. This would lessen the emphasis on procedures and potentially increase students' active participation in, enjoyment of and understanding of the subject.
- There were some good examples of the use of higher-order questioning to test students' understanding and extend their thinking. In most lessons, students' responses indicated that learning was taking place.
- Overall, students were suitably challenged by the pace and content of lessons, but there were some lessons in which insufficient progress was made. Lessons should be planned to ensure that all students can progress appropriately and achieve to their potential in the subject.
- The monitoring of students' written work should include the marking of individual questions as well as a general comment. In supporting a whole-school approach to literacy, attention should be paid to the spelling of mathematical terms.
- In almost all lessons, teachers had a very good rapport with students, mutual respect was evident and the learning environment was positive and supportive of learning.

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

- There is very good provision and whole-school support for Mathematics. There is good time allocation to the subject and, in line with good practice, lessons are scheduled across the five days of the week.
- All year groups from second year onwards are concurrently timetabled. This, along with the allocation of additional teachers to Mathematics in both second and third years, allows very good access for students to the different levels of the subject. First-year

classes are taught a common programme, appropriately allowing them time to settle prior to the formation of level-specific groups.

- There is a wide range of resources available in the school to support the teaching and learning of Mathematics, including two dedicated mathematics rooms each fitted with an interactive whiteboard. It is hoped that as teachers settle in to the new school building there will be increased use of these very useful technological tools.
- School management encourages and facilitates participation in continuing professional development (CPD) and all teachers are currently attending Project Maths CPD. Almost all teachers are teaching the subject in line with their qualifications and expertise.
- Appropriate arrangements are in place for identifying and supporting students who find the subject particularly challenging. At the time of the evaluation there were plans to trial team teaching as an additional support mechanism.

### **PLANNING AND PREPARATION**

- The quality of planning and preparation is good. A subject department structure has been established and the role of co-ordinator, to be rotated, is in place. It would be an opportune time for the members of the mathematics department to agree a role description for co-ordinator, which could then be documented in the subject plan.
- Formal meetings of the mathematics team are scheduled once per term and informal meetings take place as frequently as necessary. Minutes kept of formal meetings indicate collaboration and cooperation in areas including resources, assessment and review.
- It is recommended that teaching and learning become the focus of formal team meetings. Project Maths teaching and learning plans as well as methodologies and activities tried and tested by teachers in class should be formally shared and discussed. Successful ones should be adopted by the team and subsequently integrated into planning documentation.
- As the school is growing in size, it can be expected that new teachers will continue to join the mathematics department over the coming years. To support these teachers, who may not have availed of externally provided CPD, school-based CPD should be organised internally for each of the Project Maths strands.
- Significant time and effort has been put into the development of a subject plan and the preparation of teaching and learning resources and this is recognised and applauded. The template currently being used to prepare schemes of work may need to be reviewed to ensure it fully meets the needs of team members.
- Most teachers made individual planning and preparation documentation available during the inspection and the comprehensive preparation of some teachers was evident.

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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 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.