

An Roinn Oideachais agus Scileanna
Department of Education and Skills

Subject Inspection of Mathematics
REPORT

Collinstown Park Community College
Neilstown Road, Rowlagh, Clondalkin, Dublin 22
Roll number: 70041J

Date of inspection: 1 October 2015



AN ROINN | DEPARTMENT OF
OIDEACHAIS | EDUCATION
AGUS SCILEANNA | AND SKILLS

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

INFORMATION ON THE INSPECTION

Dates of inspection	30 September and 01 October 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 nine class periods• Discussion with the learning-support co-ordinator• Examination of students' work• Feedback to principal and teachers

MAIN FINDINGS

- The quality of teaching and learning in Mathematics varied from good to excellent with a number of lessons being very good.
- Timetabling provision for Mathematics is very good and the department is very well resourced.
- The qualifications profile of the mathematics department is excellent.
- Arrangements for identifying and supporting students with special education needs or requiring learning support in Mathematics are very good.
- Subject department planning in Mathematics is very well advanced and benefits from the very good leadership provided by the subject co-ordinator.

MAIN RECOMMENDATIONS

- The homework policy for Mathematics should reflect the role of homework in facilitating collaborative and whole-class learning and the need to provide opportunities for both problem solving and problem posing.
 - Future planning in Mathematics should focus on the adoption of common approaches to teaching the key mathematical concepts and operations.
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INTRODUCTION

Collinstown Park Community College operates under the aegis of the Dublin and Dún Laoghaire Education and Training Board (DDLETB). The school participates in Delivering Equality of Opportunity in Schools (DEIS), the Department of Education and Skills action plan for educational inclusion. All Junior Certificate and Leaving Certificate programmes are provided and the Transition Year (TY) is compulsory for students. At the time of the evaluation the school had an enrolment of 601 students.

TEACHING AND LEARNING

- The quality of teaching varied from excellent to good with the number of lessons being very good.
- The best lessons were characterised by the unrelenting focus on student learning, the effective integration of resources, high-quality teacher questioning and positive contributions, in the form of questions and suggested approaches to problem solving, by the students themselves.
- The majority of lessons also featured very good differentiation in the form of individualised teacher support and modification of the lesson content to address the needs of students as they became apparent.
- The most impressive feature of the best lessons was the lens through which they were taught which served to link the lesson content to the students' prior learning, motivate the content of future lessons and create pathways to deep understanding of the concepts underpinning the material being covered. Where there was scope for improvement the rationale for the lesson content was unclear and links to other areas of the curriculum were not exploited.
- A range of teaching methods was in evidence. Very effective use was made of pair and group work in a number of lessons and resources designed to support the approach promoted by Project Maths were integrated into the majority of lessons.
- The quality of student learning was very good. The use of assessment for learning (AfL) techniques featured in the majority of lessons and served to include all students in active learning and encouraged them to explain their reasoning or appreciate how the approach they adopted could be improved. One area for development is the integration of problem-solving strategies, and the involvement of the student in problem posing, as an integral part of lesson delivery.
- An extensive whole-school assessment policy detailing the role of profiling in the JCSP and the AfL more generally in driving high-quality learning and teaching, is in place. The school's homework policy is also very good but should be tailored slightly by the mathematics department to reflect the needs of the subject in this area. In particular, consideration should be given to the role of homework in facilitating collaborative and whole-class learning when homework is being corrected and the need to provide opportunities for problem solving and problem posing when it is being assigned.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- Timetabling provision for Mathematics is very good. The time allocated is generous and the scheduling of mathematics lessons ensures that students have access to the level most appropriate to their needs and abilities for as long as possible.

- The provision of a JCSP class in each year in junior cycle ensures that students with the greatest need receive appropriate support in an inclusive and effective manner.
- The mathematics department is very well resourced. All mathematics teachers have access to the school's extensive information and communication technology (ICT) infrastructure and to a range of resources intended to facilitate active teaching and learning. The members of the department have collaborated effectively in creating classroom resources and in providing access to all its members to the resources through the departments shared folder on the school's intranet. In addition, the *i-tunes* project taking place across the entire ETB will provide the teachers with access to an extensive library of interactive resources that can be tailored to the needs of individual classes by the end-user. This development promises to drive innovation and promote and exploit the power of ICT in engaging students actively with their own learning.
- The qualifications profile of the mathematics department is excellent with all of the teachers holding an appropriate qualification in Mathematics. The members of the department are committed to their continuing professional development and have attended all the workshops provided to support Project Maths, arranged school visits by members of the Project Maths Development Team and engaged with postgraduate programmes in their own time.
- Arrangements for identifying and supporting students with special education needs or requiring learning support in Mathematics are very good. Very good relationships have been established with the primary schools from which the students come, which ensures effective transfer of information relating to the students' needs and abilities and appropriate placement of students in the support classes mentioned above. The transfer process is also bolstered by consultation with the primary school teachers when the outcomes of the assessments taken by the students become available thus ensuring that the performance of each student is in line with expectations and correct placement of students subsequently.

PLANNING AND PREPARATION

- Subject department planning in Mathematics is very well advanced. The operation of the department is managed by a co-ordinator who adopts the role on a voluntary basis, provides very good leadership and has a clear vision for future development of the department. Regular meetings are held and the department operates in a spirit of collaboration and partnership.
 - A very good subject department plan, which provides a robust framework to support department planning is in place. The schemes of work contained in the plan are extensive and written in terms of learning outcomes. It is particularly welcome to see the Common Introductory Course being assiduously followed in first year and initial indications are that this practice is already bearing fruit with an additional class following higher-level Mathematics in second year.
 - In building on the existing good practice, future planning in Mathematics should focus on the adoption of common approaches to teaching the key mathematical concepts and operations.
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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 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.

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 regards the report as an endorsement of the professionalism of the members of Mathematics Department.

The Board is pleased that the report acknowledged that the arrangements for identifying and supporting students with special education needs or requiring learning support in Mathematics are very good and also that the subject department planning in Mathematics is very well advanced and benefits from the very good leadership provided by the subject co-ordinator. Furthermore, the Board acknowledges that the report identified that the quality of teaching and learning in Mathematics varied from good to excellent with a number of lessons being very good and that the timetabling provision for Mathematics is very good. The Board of Management congratulates everyone involved on their contribution to this very good 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 Mathematical Department will ensure that the homework policy for Mathematics will reflect the role of homework in facilitating collaborative and whole-class learning and the need to provide opportunities for both problem solving and problem posing.
- Planning in Mathematics has already begun to focus on the adoption of common approaches to teaching the key mathematical concepts and operations.