

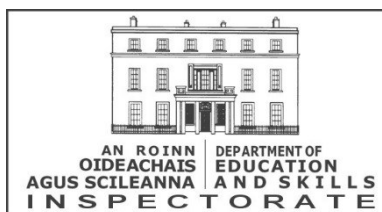
**An Roinn Oideachais agus Scileanna**

**Department of Education and Skills**

**Subject Inspection of Mathematics  
REPORT**

**Coláiste Nano Nagle  
Sexton Street, Limerick  
Roll number: 64250J**

**Date of inspection: 8 March 2016**



# REPORT ON THE QUALITY OF LEARNING AND TEACHING IN MATHEMATICS

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## INFORMATION ON THE INSPECTION

<b>Date(s) of inspection</b>	7 and 8 March 2016
<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 eight class periods</li><li>• Examination of students' work</li><li>• Feedback to principal and teachers</li></ul>

## MAIN FINDINGS

- The quality of teaching and learning ranged from very good in most lessons to requiring significant improvement in a few lessons.
- In the majority of lessons, a wide range of methodologies was used to ensure the visual, auditory and kinaesthetic (VAK) aspects of all learners were activated.
- Classroom management was very good in all lessons with evidence of good rapport between students and teachers throughout the school.
- Management encourages and supports teachers' engagement with continuing professional development (CPD).
- The mathematics department is well resourced and classrooms are equipped with information and communications technology (ICT) to support learning.
- Transition year (TY) classes and sixth year classes each benefit from an extra lesson period weekly.

## MAIN RECOMMENDATIONS

- As per circulars 0058/2011 and 0025/2012, every effort should be made to deploy teachers who hold a qualification in mathematics to mathematics teaching, especially in the formative years of junior cycle.
  - It is recommended that the role of mathematics co-ordinator be rotated and an agreed role description should be produced.
  - The department should build on the practice of peer learning, peer collaboration and peer assessment to further support learning.
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## **INTRODUCTION**

Coláiste Nano Nagle is located in Limerick city. It is a voluntary secondary school under the trusteeship of the Catholic Education Irish School Trust (CEIST). There are 311 students enrolled in mainstream programmes and the school also offers Post-Leaving Certificate (PLC) courses. The school participates in the Department of Education and Skills' action plan for delivering equality of opportunity in schools (DEIS).

## **TEACHING AND LEARNING**

- A very good quality of teaching and learning was observed in the majority of lessons. In the best lessons, careful individual planning ensured the visual, auditory and kinaesthetic aspects of the learners were activated. Students were supported to make progress and effective differentiation ensured all were engaged and achieving. There was significant scope for improvement in lessons which did not follow the department schemes of work and where no alternative evidence of planning was produced.
- The best lessons had clear learning intentions which were understood by both the teacher and the students. The high expectations set in these lessons ensured students were valued and achieving to their full potential. Innovative and interesting resources were employed to facilitate progression and students worked collaboratively and effectively in the best lessons.
- Classroom management was very good in all lessons and good rapport between staff and students was evident throughout the school. The majority of classrooms were well decorated and provided positive learning environments for the students.
- Homework was assigned and monitored regularly in most lessons. Formative feedback should provide guidance for improvement as well as affirm students' work. When used well and regularly, formative feedback will ensure copybooks are valuable revision documents. Some of the class groups are assessed using a combination of summative assessment combined with a grade for a project which is commendable.
- The best lessons ensured students' mathematical literacy was advanced by providing good quality work sheets and by facilitating peer assessment and peer learning. Questioning was used effectively to prompt and scaffold responses from students. One very good lesson engaged students immediately by having a quick definition revision exercise while the roll was called and students arrived and settled. However, in another lesson, one of the work sheets given to students had a number of grammatical errors. Good literacy skills should be modelled in all subjects.

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

- Senior management and the board of management have responsibility for the deployment of teachers to ensure that students receive appropriate, well-planned and effective mathematics lessons. Because of the importance of ensuring students gain a good foundation during junior cycle it is recommended that the school explore options to ensure that only suitably qualified mathematics teachers teach the subject. As there is a sufficient number of suitably qualified teachers in the mathematics department, management should treat this as a priority issue for future timetable planning.

- Timetabling provision for Mathematics is good with sixth years and TY classes benefitting from an additional class period per week. Concurrent timetabling allows for movement between levels and students are encouraged to remain at the highest level for as long as possible. A change of level can only occur with parental consent and after receiving advice from the guidance counsellor.
- Management is supportive of teachers' engagement with continuing professional development. The mathematics department is well resourced and teachers are equipped to use ICT to support teaching and learning. ICT was used in all lessons. The best use was where students presented their own work, displayed their own work and where ICT demonstrations were legible and clear.

#### **PLANNING AND PREPARATION**

- The ongoing work to produce comprehensive online subject plans supplemented with a bank of resources is commendable. The lesson reviews and reflective comments noted in many of the good individual plans should also be included in the shared department plans.
- Cohesive department planning will provide support to ensure that lessons are appropriately paced to enable students achieve suitable targets for learning. Where lessons had considerable scope for improvement, they were not following the schemes of work provided and no evidence of an alternative plan was produced.
- There is evidence of strong collaboration between many of the department members. However, there is a need to ensure that regular, minuted department meetings occur where pedagogical practice and assessment techniques are shared. The very skilled work noted in most of the lessons will be further enhanced when shared and discussed. It is recommended that the department build on the use of targeted and specific group activities to further develop the practice of peer collaboration and encourage more use of mathematical language.

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