

An Roinn Oideachais agus Scileanna
Department of Education and Skills

Subject Inspection of Mathematics
REPORT

Maynooth Post Primary School
Maynooth, County Kildare
Roll number: 70700A

Date of inspection: 19 March 2013



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	18 and 19 March 2013
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 eleven class periods• Discussion with members of the learning-support department• Examination of students' work• Feedback to principal, deputy principals and teachers

MAIN FINDINGS

- The quality of teaching varied from excellent to poor with good teaching evident in the vast majority of lessons.
- Assessment practices, particularly in relation to formal assessment, are very good.
- The quality of student learning is very good and positive attitudes towards Mathematics are actively promoted.
- Mathematics is well supported by management. Timetable provision for Mathematics and the resources available for teaching and learning Mathematics are very good.
- The mathematics department work as a cohesive unit and subject department planning in Mathematics is very good.

MAIN RECOMMENDATIONS

- Future planning in Mathematics should focus on agreeing how the learning outcomes contained in the syllabus documents are interpreted and how the curriculum should be delivered to ensure that these outcomes are attained. Planning should include discussions about how the curricular strands are interlinked and how this can be reflected in the manner in which the curriculum is delivered.
- The timetabling arrangement in first year, where one class group is taught for three periods per week by one teacher and by another for two, should be reviewed and should not be replicated in future timetables.
- The mathematics plan for TY should be reviewed and the revised plan should reflect the recent developments in second-level education.

INTRODUCTION

Maynooth Post Primary School is a large co-educational multi-denominational school operating under the aegis of Co. Kildare VEC. The school caters for the needs of students from diverse cultural, ethnic, religious and social backgrounds. The school offers a broad and balanced curriculum, including programmes such as Transition Year (TY) and the Leaving Certificate Vocational Programme (LCVP). A Sraith Lán-ghaelach was established in 2002 and, enrolment permitting, it will be upgraded to an Aonad later this year.

TEACHING AND LEARNING

- The quality of teaching varied from excellent to poor, with good teaching evident in the vast majority of lessons. Almost all of the lessons had a good structure and were well planned. All of the lessons were delivered with enthusiasm and care.
- The very best lessons were distinguished from the remainder by the comprehensive manner in which the learning outcomes were explored and by the range of learning experiences provided to the students.
- In the majority of cases, however, while the lesson content was dealt with in a competent manner, the depth of treatment, particularly in relation to how the content related to and impacted on the remaining syllabus strands, was not sufficiently rigorous. Where deficiencies were evident, they were due to a limited interpretation of the learning outcomes contained in the syllabus documents. It is recommended that future department planning focus on addressing this shortcoming.
- Information and communication technology (ICT) was used to facilitate lesson delivery in the majority of lessons. Where it was seen to best effect, dynamic mathematics software, the calculator and presentation software served to illustrate the concepts underpinning the lesson content. In other instances the technology was used to display content and did little to deepen the students' understanding and appreciation of the material being covered.
- Practices relating to the ongoing assessment of student progress are good. Homework is regularly assigned and corrected. The students' copybooks are well maintained and are monitored appropriately. The range of teacher questioning, which primarily served to engage the students with the lesson content and to develop their skills set, should be expanded to include the higher-order questions and problem solving. Where this approach was used, it created a more enriched and challenging learning environment.
- The quality of student learning, as evidenced by their responses during lessons, the quality of the work in the homework copybooks and attainment in the certificate examinations, are very good.
- Classroom management, student behaviour and engagement were very good. Positive attitudes towards Mathematics were modelled and promoted by the teachers. This positive approach is reflected in the number of students following higher level Mathematics in both junior and senior cycle.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT.

- Timetabling provision for Mathematics is very good. The time available for teaching Mathematics is generous and the scheduling of the mathematics lessons, facilitates the uptake of higher level Mathematics. The provision of one double period of Mathematics per week in senior cycle promotes the teaching methods espoused by Project Maths. However, the anomaly in first year, where one class group is taught by one teacher for three periods per week and another for two, must be reviewed. This type of provision should be avoided in future timetables.
- The qualifications profile of the mathematics department is very good and management has been successful in limiting the size of the department so that all of the members are teaching a number of class groups across different levels. The members of the department are committed to ongoing continuing professional development and have attended the workshops provided as part of the national rollout of Project Maths in full. One of the members of the department is an associate member of the Project Maths Development Team and a number of members of the department attend post-graduate programmes in their own time.
- The mathematics department is very well resourced. All mathematics teachers have access to the school's extensive ICT infrastructure and other resources intended to facilitate active teaching and learning. The members of the department collaborate very effectively in developing their own resources and arrangements for sharing the various resources are very good.
- Procedures for facilitating student transfer into first year and for identifying those with special education needs or requiring additional support in Mathematics are very good. Support for students identified during the transfer process is delivered in a timely, student-centred and effective manner.
- Formal assessment practices in Mathematics are well managed and feature very good collaboration across the department. Common papers with agreed marking schemes are prepared for all formal assessments. The assessment materials are produced to a very high standard and model the style and layout of the papers the students will encounter in the certificate examinations.

PLANNING AND PREPARATION

- Subject department planning features an admirable degree of collaboration across the department. Responsibility for co-ordinating the department's activities rotates between the members of the department. It is evident from the quality of the planning that this arrangement works very well.
- A very good subject department plan for Mathematics is in place. The plan is clear and concise and is both a very useful tool in supporting department planning and in familiarising those new to the department with the manner in which the department operates.
- In line with the recommendation made earlier in this report, future planning should focus on agreeing how the learning outcomes contained in the syllabus documents are interpreted. It should also address the manner in which the curricular strands are

interlinked and on how the curriculum can be delivered in a connected and developmental manner.

- A separate plan for Mathematics in TY is in place and is in need of review. The review should be informed by recent developments in second-level education, particularly the introduction of Project Maths and the *National Strategy to improve Literacy and Numeracy among Children and Young People 2011-2020*.

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