

An Roinn Oideachais agus Scileanna

Department of Education and Skills

**Subject Inspection of Mathematics
REPORT**

**St. Mary's Secondary School
Glasnevin
Roll number: 60770P**

Date of inspection: 6 February 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	5, 6 February 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 seven lessons• Examination of students' written work

MAIN FINDINGS

- The overall quality of teaching and learning was good, with some elements of very good practice. There was an affirming and supportive environment for students' learning.
- In many lessons, resources used enhanced students' learning.
- Mathematics classes are concurrently timetabled in almost all year groups, indicating a strong commitment to the subject by the school, as well as facilitating students in their choice of level.
- It is good practice that recommendations regarding students' level of study are based on the outcomes of a number of common tests. Students are encouraged to study Mathematics at the highest level for as long as possible.
- The level of collaborative planning within the mathematics team has increased significantly in recent years and there are regular formal and informal meetings.
- The presentation of data on the achievement of students in the certificate examinations is detailed and is commendably accompanied by documented analysis and action plans.

MAIN RECOMMENDATIONS

- While questioning was used well to check students' understanding, there should be greater use of higher-order questions to challenge students and deepen their understanding. In addition, care needs to be taken to ensure there is a sufficient level of challenge for better-able students in all class groupings.
- Efforts should be made to increase the time allocation to first-year classes.
- Whole team meetings should include a greater focus on the discussion of new methodologies tried in class as a means of increasing all teachers' repertoires of methodologies.
- In the next review of the plan, programme content should be presented in terms of learning outcomes for students and matched to syllabus strands.

INTRODUCTION

St Mary's Secondary School, operating under the auspices of the Le Chéile Trust, has a current enrolment of 736 girls. Programmes offered are the Junior Certificate, optional Transition Year (TY), the Leaving Certificate Vocational Programme (LCVP) and the established Leaving Certificate.

TEACHING AND LEARNING

- The overall quality of teaching and learning was good, with some elements of very good practice.
- All teachers prepared well for lessons, most of which included supporting materials and electronic presentations.
- All lessons had clear objectives that were shared with students at the start and, in many cases, reviewed at the end. The expression of the lesson objectives in terms of learning outcomes for students is recommended.
- Explanations of concepts and methods were clear and questioning was used well to check students' understanding. There was scope, however, to include a greater number of questions that challenge students and deepen their understanding.
- Teachers in all lessons and students in some lessons showed ease in using topic-specific terminology. In a small number of lessons, attention paid to students' understanding of topic terminology was impressive.
- In many lessons, resources, including ICT, were an enhancement to students' learning. This was also true of links made between lesson content and real life.
- Students engaged fully with lesson activities, although there was scope to increase their involvement in lessons.
- Students made progress in all lessons, but care needs to be taken to ensure there is a sufficient level of challenge for better-able students in all class groupings.
- The good professional rapport between teachers and students created affirming and supportive environments for students' learning.
- There was some very good monitoring of students' written work and examples of very well-presented, high-quality work were seen in lessons.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- The time allocation to Mathematics is mostly in line with guidelines and most students receive five periods of mathematics tuition per week. Senior-cycle students are supported at higher level through additional timetabled periods and this is good practice. First-year classes currently have four periods per week and efforts should be made to increase this.
- Mathematics classes are concurrently timetabled in all year groups from second year onwards. This is indicative of a strong commitment to the subject by the school, as well as facilitating students in their choice of level.
- First-year classes are taught as mixed-ability groupings, allowing students appropriate time to settle before decisions regarding level of study have to be made.

- It is good practice that recommendations regarding students' level of study are based on the outcomes of a number of common tests administered through first year. Students are encouraged to study Mathematics at the highest level for as long as possible.
- Appropriate strategies are in place for identifying students with particular difficulties in Mathematics. It is notable that the school has been open to trying different models of support and continues to modify its support programmes. The learning-support programme currently operating in first year includes a numeracy element for all students and this is commended.
- Curriculum programmes and levels are rotated between teachers, with continuity maintained from second to third years and from fifth to sixth years, in line with good practice. There are currently two teachers sharing responsibility for higher-level Leaving Certificate classes, a number that may need to be increased in line with increasing numbers of students opting for this course.
- All teachers are facilitated in attending Project Maths in-service courses currently being offered. In addition, a number of teachers are participating, or have participated, in continuing professional development (CPD) activities outside school hours. This shows a high level of commitment to the subject and to the students and is commended.

PLANNING AND PREPARATION

- The mathematics co-ordinator is currently in the fourth year of her term. During this time, the level of collaborative planning within the mathematics team has increased significantly.
- While the regular informal meetings often include discussion of new methodologies, whole team meetings should focus more on this aspect as a means of increasing all teachers' repertoires.
- Significant effort has been put into developing impressive banks of shared resources and a mathematics plan that includes agreed programmes of work for each year group and level. In line with good practice, there is an indicative time frame for progress and links to available resources. In the next review of the plan, programme content should be presented in terms of learning outcomes for students and matched to syllabus strands. This would highlight the interlinking of material and skills from the five different strands.
- The mathematics plan includes detailed presentation of data on attainment in the certificate examinations. It is notable that the data are accompanied by documented analysis and action plans.
- Co-curricular mathematics activities are promoted strongly by the team. These activities are very important in generating enthusiasm for Mathematics and in providing a challenge for better-able students.
- It is commendable that the mathematics team is engaging in reflective practice. In line with School Self-Evaluation (SSE) processes, this should be extended to include the student and parent voices.

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

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