An Roinn Oideachais agus Scileanna

Department of Education and Skills

Subject Inspection in Mathematics

REPORT

Ainm na scoile / School name	Dominican College
Seoladh na scoile / School address	Taylor's Hill Galway
Uimhir rolla / Roll number	62990Q

Date of Inspection: 09-12-2016

AN ROINN OIDEACHAIS AGUS SCILEANNA | DEPARTMENT OF EDUCATION AND SKILLS

WHAT IS A SUBJECT INSPECTION?

Subject Inspections report on the quality of work in individual curriculum areas within a school. They affirm good practice and make recommendations, where appropriate, to aid the further development of the subject in the school.

HOW TO READ THIS REPORT

During this inspection, the inspector evaluated learning and teaching in Mathematics under the following headings:

1. Learning, teaching and assessment
2. Subject provision and whole-school support
3. Planning and preparation

Inspectors describe the quality of each of these areas using the Inspectorate's quality continuum which is shown on the final page of this report. The quality continuum provides examples of the language used by inspectors when evaluating and describing the quality of the school's provision in each area.

Subject Inspection

INSPECTION ACTIVITIES DURING THIS INSPECTION

Date of inspection	09 December 2016
Inspection activities undertaken • Review of relevant documents • Discussion with principal and key staff • Interaction with students	• Observation of teaching and learning during seven class periods • Examination of students' work • Feedback to principal and relevant staff

SCHOOL CONTEXT

The Dominican College, Taylor's Hill is an all-girls' post primary school situated in Galway city. It operates under the trusteeship of Le Chéile – A Catholic Schools Trust and has an enrolment of 625 students. As well as the Junior and Leaving Certificate programmes, the school offers the Leaving Certificate Vocational Programme and an optional Transition Year (TY) programme.

SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

FINDINGS

- The quality of teaching was good or very good in most lessons.
- While the quality of student learning was predominantly good or very good, there was scope to increase the level of students' active participation in some lessons.
- There was scope to develop and improve assessment practices and monitoring of students' work.
- Teachers' individual planning was of good quality and in most instances aligned with the overall subject department plan.
- The rationale underpinning the formation of class groupings in TY is in need of review.
- Senior management and the board of management support the mathematics department by providing an annual budget and facilitating continuing professional development (CPD) opportunities.

RECOMMENDATIONS

- It is recommended that more opportunities to foster independent learning skills and increase students' active participation in lessons be created.
- A common approach to formative assessment should be agreed, developed and implemented by the mathematics department.
- It is recommended that the TY mathematics plan be reviewed with the aim of providing mixed-ability lessons for the entire year group.
- Formal department meetings should include time to share and discuss classroom practice, how to best use the annual budget to support learning as well as setting targets for improvement.

DETAILED FINDINGS AND RECOMMENDATIONS

1. TEACHING AND LEARNING

- The quality of teaching was good or very good in most lessons. In the best lessons, students were allowed time to work together on well-planned tasks. They had time to discuss possible solutions and come to agreed conclusions. The teachers circulated to provide support, monitor progress and prompt reflection through questioning. Students worked purposefully for the duration of the lessons and had time to develop their verbal skills through discussion and giving feedback to the teacher. To further exploit the benefits of this type of lesson, it is recommended that students be required to present their conclusions to the whole class group.
- In most lessons, the standard of learning was good or very good. Including elements of discovery learning and more active student engagement would further enhance the students' learning experiences. Although students progressed in the lessons, there were some missed opportunities for developing problem solving strategies and independent learning skills. Where learning was best, all students felt a sense of achievement and all experienced some challenge.
- There was an excellent rapport between the teachers and students and all interactions observed were very supportive and positive. Students in all lessons were happy to seek clarification, suggest various solutions and seek assistance from each other as they worked. Creating more opportunities for peer support and peer assessment would help increase and enhance learning in all lessons.
- There was scope to improve the quality of assessment and level of monitoring of students' work in all lessons. Understanding and progress were checked largely through in-class questioning and summative assessments. There was little evidence, in the samples of work examined, of the use effective formative feedback or of sufficient monitoring of copybooks. This is an area in need of improvement.
- The mathematics fair organised by TY groups for the first-year students was very successful and is highly commended. Not only did it help raise the profile of Mathematics, it provided some fun learning opportunities for the younger students and helped the TY students consider Mathematics from a different perspective.
- It is recommended that the streaming of TY students for two of their three modules be reviewed. Mixed-ability lessons for the entire year is recommended best practice.

2. SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- Timetabling provision for Mathematics is good. Additional mathematics provision for third, fifth and sixth year means students are taught in smaller class groups. First-year students are taught in mixed-ability classes. For all other year groups, students are banded, based on the level at which they are studying, and taught in mixed-ability groups within the band.
- The mathematics department is well resourced. As well as receiving an annual budget, any requests for additional resources are met favourably where possible. There was no documented evidence of how the annual budget was spent or how decisions were reached as to what it would be spent on. It is recommended that during department meetings discussion takes place around the use of resources including reflection on how new resources are used and to what extent they benefit classroom practice. It is good practice to document how the annual budget is spent and how decisions are reached as to what is purchased.

- Information and communications technology (ICT) facilities are good. There are data projectors and desktop computers in each classroom with internet access. Teachers are also supported through relevant CPD for ICT use, both for in-class use and for administration purposes. It is recommended that lesson reflection keeps in mind the potential of ICT to enhance and support learning.

3. PLANNING AND PREPARATION

- The mathematics teachers present as an enthusiastic and committed team. There is regular informal collaboration among teachers as well as scheduled formal department meetings. It is recommended that during formal meetings time be set aside to discuss assessment practices and teaching methodologies. Improvement targets should be set, some of which could be based on the certificate examination data which is analysed annually.
- The subject department plan includes schemes of work for all year groups and levels. At the time of the inspection, it was being transferred to a shared computer drive.
- Very good individual planning was evident for the majority of lessons. Tasks and activities were linked to prior learning and facilitated progression. The majority of lessons were in line with the department plan. The expectations in one lesson were not sufficiently high for the ability levels of the students and maximum benefit was not achieved. The particular exercise was one where students should have been shown how to check their own solutions. In another lesson, students would have benefited from having hands-on resources to help them visualise the concept required. Alternatively, ICT could have been used to provide a very good visual example. Future planning should maximise learning opportunities by setting sufficiently high expectations and using the available resources.

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 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.

THE INSPECTORATE'S QUALITY CONTINUUM

Inspectors describe the quality of provision in the school using the Inspectorate's quality continuum which is shown below. The quality continuum provides examples of the language used by inspectors when evaluating and describing the quality the school's provision of each area.

Level	Description	Example of descriptive terms
Very Good	***Very good*** applies where the quality of the areas evaluated is of a very high standard. The very few areas for improvement that exist do not significantly impact on the overall quality of provision. For some schools in this category the quality of what is evaluated is ***outstanding*** and provides an example for other schools of exceptionally high standards of provision.	Very good; of a very high quality; very effective practice; highly commendable; very successful; few areas for improvement; notable; of a very high standard. Excellent; outstanding; exceptionally high standard, with very significant strengths; exemplary
Good	***Good*** applies where the strengths in the areas evaluated clearly outweigh the areas in need of improvement. The areas requiring improvement impact on the quality of pupils' learning. The school needs to build on its strengths and take action to address the areas identified as requiring improvement in order to achieve a *very good* standard.	Good; good quality; valuable; effective practice; competent; useful; commendable; good standard; some areas for improvement
Satisfactory	***Satisfactory*** applies where the quality of provision is adequate. The strengths in what is being evaluated just outweigh the shortcomings. While the shortcomings do not have a significant negative impact they constrain the quality of the learning experiences and should be addressed in order to achieve a better standard.	Satisfactory; adequate; appropriate provision although some possibilities for improvement exist; acceptable level of quality; improvement needed in some areas
Fair	***Fair*** applies where, although there are some strengths in the areas evaluated, deficiencies or shortcomings that outweigh those strengths also exist. The school will have to address certain deficiencies without delay in order to ensure that provision is satisfactory or better.	Fair; evident weaknesses that are impacting on pupils' learning; less than satisfactory; experiencing difficulty; must improve in specified areas; action required to improve
Weak	***Weak*** applies where there are serious deficiencies in the areas evaluated. Immediate and coordinated whole-school action is required to address the areas of concern. In some cases, the intervention of other agencies may be required to support improvements.	Weak; unsatisfactory; insufficient; ineffective; poor; requiring significant change, development or improvement; experiencing significant difficulties;