

An Roinn Oideachais agus Scileanna
Department of Education and Skills

Subject Inspection in Mathematics

REPORT

Ainm na scoile / School name	Le Chéile Secondary School
Seoladh na scoile / School address	Hollystown Road Tyrellstown Dublin 15
Uimhir rolla / Roll number	68083N

Date of Inspection: 29-03-2017



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	29-03-2017
Inspection activities undertaken <ul style="list-style-type: none">• Review of relevant documents• Discussion with principal and key staff• Interaction with students	<ul style="list-style-type: none">• Observation of teaching and learning during six class periods• Examination of students' work• Feedback to principal and relevant staff

SCHOOL CONTEXT

Le Chéile Secondary School, Tyrrellstown is a co-educational school in north county Dublin. Opened in 2014, the school has a current enrolment of 308 students. The school offers the Junior Certificate and is planning its curriculum to include a broad range of programmes to meet the needs of its students.

SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

FINDINGS

- The quality of teaching in the majority of lessons was very good with good practice also noted.
- The predominant teaching, and mostly effective approach observed was a “flipped classroom”.
- Excellent whole-school support for Mathematics is provided for by school management.
- The mathematics teachers presented as being highly motivated and enthusiastic about the subject and provide a wide range of opportunities for students to participate in Mathematics outside of the classroom setting.
- Student engagement and overall learning was very good.
- Highly effective collaborative practices have enabled excellent progress in subject department planning and in the development of schemes of work for Mathematics.

RECOMMENDATIONS

- Teachers should share their expertise by engaging in collaborative review of teaching and learning practices including peer lesson visits.

DETAILED FINDINGS AND RECOMMENDATIONS

1. TEACHING, LEARNING AND ASSESSMENT

- The quality of teaching in the majority of lessons was very good with good practice also noted.
- A feature of all lessons was the very high quality of teacher preparation and the availability of all necessary materials. All lessons were very well planned and based on the department's schemes of work.
- Lessons were appropriately paced and structured and facilitated very good progress.
- Learning intentions were explicitly explained at the outset of the lesson. Many teachers concluded the lesson by summarising the learning. A plenary session should be used in lessons to ascertain key learning within the lesson while highlighting further areas for development.
- Classroom management was excellent and in all lessons interactions were respectful and positive. Student engagement in their learning was mostly very positive and they demonstrated a willingness to engage with their learning.
- In all lessons, suitably high expectations of student attention to their classwork and homework was noted.
- A "flipped-classroom" approach was the predominant teaching approach used in the majority of lessons. This approach facilitated students to take ownership of their learning. The effectiveness of this approach varied from lesson to lesson. In the most successful lesson this approach enabled tasks to be appropriately differentiated to meet the individual needs of students.
- Some very good quality questioning was noted, including global and individual, lower-order questions to more challenging higher-order questions. Where best practice was noted student questioning was used as a whole-class learning opportunity. This practice could be used more beneficially in all lessons.
- Teachers regularly circulated to provide individual attention to students where appropriate. While the overall quality of learning was very good, on occasion some students did present with errors in basic mathematical operations. Teachers in general dealt with such inaccuracies on an individual basis, however, there is merit to use such errors as a learning opportunity for all students in the lesson.
- Classroom displays were very vibrant and added to a very positive and supportive environment for the teaching and learning of the subject. In almost all classrooms the layout has been adapted to facilitate collaborative learning opportunities for students.
- A review of students' copybooks and teacher records indicates that monitoring of students' work takes place. Strategies that encourage students to record individual oral feedback from their teachers should be agreed and implemented on a department wide basis. This would further support the mathematics department in facilitating students to take further ownership of their learning.
- A range of highly effective resources was integrated into lessons. Tablet devices are used by students within the school, and teachers upload materials to support students' independent learning. Teacher prepared worksheets were of a very high quality and suitably differentiated to support the learning needs of the individual student.

2. SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- Whole-school support for Mathematics is excellent. In addition to very good timetabling provision, the department benefits from the deployment of additional teachers in all year groups to support student learning.
- The mathematics department comprises five teachers, who demonstrated high levels of enthusiasm for the subject and for the promotion of the subject. All teachers are graduates in the subject area. As the school develops, opportunities for rotating the teaching of programmes and levels will facilitate capacity building in the department.
- Continuing professional development is promoted by management. Teachers should share their expertise by engaging in collaborative review of teaching and learning practices including peer lesson visits.
- Additional supports are in place for students who find Mathematics challenging. Models of support include one-to-one and small class withdrawal. In addition support is also provided by the mathematics teachers at lunchtime and after school for students.
- An excellent range of co-curricular and extra-curricular events is available to students in the school to promote and support Mathematics. In addition to students participating in events organised during Maths Week, students compete in competitions organised by the Irish Mathematics Teachers Association.

3. PLANNING AND PREPARATION

- The overall co-ordination of the mathematics department is excellent and all duties associated with the voluntary position are undertaken in a highly effective manner.
- Within a short period of time excellent planning practices have been established by the mathematics department. Effective collaborative practices have resulted in the development of a comprehensive subject department plan which includes the organisational details of the subject, schemes of work for all year groups and levels and a development section.
- Excellent schemes of work have been collaboratively developed and these link with the junior cycle statements of learning, relevant key skills and integrate learning activities, resources differentiated approaches, assessment for learning strategies and linkages within the syllabus.
- A significant feature of these schemes is the teacher reflections section that allows for ongoing review and updating as appropriate.
- Minutes of meetings retained indicate very good opportunities at meetings for planning, and discussion about pedagogy. In the coming years as student complete certificate examinations, an analysis of student attainment and results from in-house examinations could be used to further subject department planning.

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 was given an opportunity to comment in writing on the findings and recommendations of the report; a response was not received from the board.

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 of 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 <i>very good</i> 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;