

**An Roinn Oideachais agus Scileanna**  
**Department of Education and Skills**

**Subject Inspection in Mathematics**

**REPORT**

<b>Ainm na scoile / School name</b>	St Joseph's Secondary School
<b>Seoladh na scoile / School address</b>	Spanish Point Miltown Malbay Co. Clare
<b>Uimhir rolla / Roll number</b>	62010C

**Date of Inspection: 13-09-2017**



**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. Teaching, learning 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

<b>Date of inspection</b>	13-09-2017
<b>Inspection activities undertaken</b> <ul style="list-style-type: none"><li>• Review of relevant documents</li><li>• Discussion with principal and key staff</li><li>• Interaction with students</li></ul>	<ul style="list-style-type: none"><li>• Observation of teaching and learning during seven class periods</li><li>• Examination of students' work</li><li>• Feedback to principal and relevant staff</li></ul>

### School context

St Joseph's Secondary School is a co-educational school located in Spanish Point in West Clare. It has an enrolment of 296 students and operates under the trusteeship of CEIST (Catholic Education An Irish Schools' Trust). The school offers an optional Transition Year (TY) programme and the Leaving Certificate Applied (LCA) programme as part of the school curriculum. A specialised unit attached to the school provides for students with autistic spectrum disorders (ASDs).

### SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

#### Findings

- Effective teaching practices were observed in the majority of lessons.
- The overall quality of learning was good.
- In all lessons, there was evidence that students were overly reliant on the teachers to provide support and that they lacked sufficient confidence to complete tasks without regular input from the teacher.
- A limited range of assessment practices was used to support students' learning.
- The quality of teaching and learning of Mathematics is adversely affected by deficiencies in whole-school policy development, in curricular planning and in how teachers are informed regarding the special educational needs (SEN) of the students in their classes.
- Collaboration between the teachers of Mathematics is largely informal; they do not work as part of an actively functioning subject department.

#### Recommendations

- It is recommended that a subject department for Mathematics be formed and that members collaborate to produce a cohesive and comprehensive plan to support the teaching and learning of the subject.
- Opportunities for students to be more actively involved in their learning, to develop skills in providing verbal solutions to higher-order tasks and to experience peer collaboration and support should be included in lesson planning for Mathematics.
- The board of management and senior management should further support the teaching and learning of Mathematics by ensuring that whole-school policies, which are relevant and up-to-date, are in place.
- Management needs to ensure that students with SEN are adequately supported by putting a functioning, formal system in place to inform teachers of the abilities and needs of all relevant students and provide guidance on strategies on how best to support them, when necessary.

## DETAILED FINDINGS AND RECOMMENDATIONS

### 1. TEACHING, LEARNING, AND ASSESSMENT

- The overall quality of teaching was good. The majority of lessons were well planned and supported by relevant digital presentations in some instances and high quality pre-prepared work sheets in others.
- The quality of students' learning ranged from very good in almost half the lessons to satisfactory in one lesson. Where learning was best, effective planning was evident; students worked on tasks which reinforced and built on their prior knowledge; activities were progressive; high expectations for the quality of work presented were set and modelled by the teacher and the homework assigned was relevant to the lesson content covered. All students would benefit from exposure to more opportunities to be actively engaged with the lesson content.
- Future planning should include tasks which will further develop students' independent and collaborative learning skills, provide opportunities for presenting and justifying their work to each other and promote self and peer assessment.
- All interactions were respectful and good rapport between teachers and students, as well as among students, was evident.
- Summative assessment is the main tool used for checking understanding and progress. There is a need for the mathematics teachers to collaborate and agree on a range of assessment practices which will be used in lessons. There is no up-to-date whole-school policy for assessment.
- Questioning was used well in many lessons to elicit information from students, to provide opportunities for students to use mathematical terminology and to prompt students' thinking. Expanding this good practice to include more higher-order questioning would provide additional opportunities to assess progress and check for understanding.
- Monitoring of work consisted mainly of initialling and dating by the teacher. It is recommended that more value be gleaned from this practice by using the opportunity to provide some formative written feedback to affirm specifics and guide for improvement. It will complement the verbal feedback provided in class.
- The school encourages students to study Mathematics to the highest level possible for as long as possible. In order to change level, consultation must take place between the student, parents, teachers and management.

### 2. SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- High quality ICT facilities, which can be used individually or as a means to collaborate, are available to all teachers. Additional resources are provided on request, where possible.
- Management has been pro-active in its approach to recruiting teachers who are qualified to teach Mathematics in senior cycle. The school has a team of mathematics teachers who can rotate levels, provide support to each other and share expertise and ideas. However, in the absence of a functioning mathematics department with a nominated co-ordinator, interactions are largely informal.

- Management is supportive of teachers' engagement with continuing professional development (CPD). However, it needs to become more pro-active in identifying whole-staff learning needs, in providing adequate training and in monitoring implementation in classrooms. Areas of immediate need identified during the inspection were curricular planning, differentiation, assessment practices and active learning methodologies.
- The quality of in-school communication to inform teachers of students' needs and abilities is unsatisfactory. There was no evidence to show that information regarding students with SEN was readily available to teachers and no evidence that teachers had been given any guidance on strategies to best support students in mainstream classes. Immediate action is required by the board of management and senior management to ensure that students with SEN are suitably supported.
- Team teaching was observed in two lessons. It consisted of a subject specialist who planned and led the lesson supported by another teacher who provided assistance by circulating to check homework completion and help students as they worked individually on set tasks.

### **3. PLANNING AND PREPARATION**

- The quality of teachers' individual lesson planning was good overall. However, there were areas where the absence of formal collaboration among the mathematics teachers resulted in overlap and re-teaching of topics covered in previous years.
- It was reported that informal collaboration takes place regularly among teachers of Mathematics. However, they do not work as a subject department. Development of a subject department plan should be initiated without delay. It should be completed within this school year and subsequently reviewed regularly to improve and modify as necessary.
- Management needs to set expectations around curriculum-related planning and ensure that relevant, up-to-date policies are in place to underpin and support the development of an actively functioning subject department.
- In establishing a subject department, the role of co-ordinator should be rotated and a role description should be agreed upon to ensure consistency, continuity and clarity.

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 of quality the school's provision of each area.

Level	Description	Example of descriptive terms
<b>Very Good</b>	<b>Very good</b> 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 <b>outstanding</b> 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
<b>Good</b>	<b>Good</b> 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
<b>Satisfactory</b>	<b>Satisfactory</b> 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
<b>Fair</b>	<b>Fair</b> 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
<b>Weak</b>	<b>Weak</b> 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;