

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

**Subject Inspection in Mathematics**

**REPORT**

<b>Ainm na scoile / School name</b>	Sandford Park School Ltd
<b>Seoladh na scoile / School address</b>	Sandford Road Ranelagh Dublin 6
<b>Uimhir rolla / Roll number</b>	60640C

**Date of Inspection: 08-02-2018**



### **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>Dates of inspection</b>	7 and 8 February 2018
<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

Sandford Park School Ltd is a fee-charging school which operates under the trusteeship of Sandford Park Holdings CLG. It has an enrolment of 119 girls and 227 boys currently. The Junior Cycle, Leaving Certificate and a compulsory Transition Year programme are provided for students.

### SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

#### Findings

- The quality of teaching and learning was very good overall; a variety of good practices worth sharing were evident.
- In almost all lessons the learning environment and planned tasks were well structured to support good learning; in a small minority of lessons, classroom management was inadequate and some lesson activities were not sufficiently engaging.
- Students with special educational needs (SEN) participated fully and inclusively in all observed lessons.
- Subject provision and whole school support for Mathematics is very good.
- Planning and preparation for the lessons observed was very good overall; students were seated in rows in all classrooms visited and this reduced the scope for collaborative learning.

#### Recommendations

- The good teaching and learning practices outlined in this report should be shared through the mathematics department's collaborative planning practices.
- The widespread good practice of providing a range of engaging tasks for students and maintaining a structured learning environment should be extended to all lessons.
- The seating in classrooms should be arranged for group work for at least part of lessons to set an expectation that students will work together.

## DETAILED FINDINGS AND RECOMMENDATIONS

### 1. TEACHING, LEARNING, AND ASSESSMENT

- The quality of teaching and learning was very good overall. There was some scope for improvement in most lessons. Excellent practice was also noted in some lessons.
- In almost all lessons, the students engaged and participated well and demonstrated an enjoyment of Mathematics. They showed very good understanding of the key concepts and fluent use of mathematical language. The atmosphere in all classrooms visited was warm and encouraging.
- In most lessons, new learning built very effectively on prior learning. Information and communications technology (ICT) in the form of geometry software, video clips and electronic slides, was used effectively to enhance learning.
- Students engaged purposefully in a range of well-designed learning activities in almost all lessons. The learning environments were ordered and lessons were well structured to support good learning. However, in a small minority of lessons inadequate classroom management and some lesson activities that were insufficiently engaging impacted negatively on student learning.
- The learning intentions were shared with the students at the outset of most lessons and this practice structured and guided the learning. A minority of lessons would have benefitted from a clearer articulation of the lesson purpose and the learning intentions.
- The variety of valuable methodologies observed included high quality teacher instruction, students working independently, problem-solving activities, games, discovery, and investigation. All lessons included a combination of more than one methodology and this worked best when there was a good balance between teacher and student input. In a few lessons there was scope for a better balance.
- In some lessons students were provided with valuable opportunities to discuss Mathematics and articulate their reasoning. This very good practice was supported by the facilitation of group or pair work. For example, collaborative learning occurred during lessons conducted in the science laboratories where the students worked very effectively in standing groups. In all classrooms visited, the students were seated at individual desks or in rows. It is recommended that the seating be arranged for group work for at least part of lessons to set an expectation that students will work together.
- In most lessons teachers had appropriately high expectations for student learning. Highly effective practice was noted where the tasks were open-ended and facilitated further challenge and where the methodology allowed students to work at their own pace. In some lessons, there was scope for further challenge to be provided for some students.
- Students with SEN were encouraged to participate fully and inclusively in all lessons. Very effective in-class support was observed; the high level of planning between the mainstream and support teachers was central to the success of this collaborative approach.
- The quality of assessment was very good in all lessons. Mini-white boards, exit surveys, and comprehensive monitoring and questioning were used to assess student progress. Very good practice was observed when teachers adapted instruction on foot of assessment.
- Questioning was used effectively to encourage students to explore concepts. This strategy was particularly successful when teachers used questioning to avoid giving students answers directly. This good practice encouraged students to persist, develop resilience and think for themselves.

- Some mathematics teachers have participated in *Reflections on Practice*; an initiative to promote collaborative lesson planning and peer review. The good teaching practices outlined in this report should be shared through this process and other established planning and sharing practices within the subject department.

## **2. SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT**

- Subject provision and whole school support for Mathematics is very good. There is a very good range of resources available, including widespread access to ICT and the inclusion of a mathematics section in the school library.
- The mathematics teachers participate extensively in continuing professional development (CPD). In keeping with good practice, the professional learning from this engagement is shared amongst members of the teaching team both formally and informally.
- Support for Mathematics students with special educational needs is very good. A range of valuable modes of delivery including team teaching and the provision of smaller classes is used to very good effect. In keeping with good practice, a policy on teaching students of exceptional ability is included in the mathematics plan.
- Valuable extra-curricular opportunities are provided for students to experience Mathematics for fun and to extend learning. Articles of mathematical interest are published in the school magazine.

## **3. PLANNING AND PREPARATION**

- The quality of planning for Mathematics is very good. The subject plan contains well-developed programmes of work that connect learning objectives, key skills, methodologies and assessment modes. A wide range of interesting resources are also outlined. It is suggested that online resources be *hyperlinked* in the electronic version of the programmes of work for convenient access during lessons.
- Teachers' collective practice is very effectively coordinated. There is evidence of valuable collaboration around teaching and learning, with for example, teachers trying new strategies and methodologies and formally sharing this experience with each other. A number of teachers are participating in research projects as part of further study and this is highly valued by school management for its potential in improving teaching and learning in Mathematics.
- A very comprehensive analysis of student outcomes in the certificate examinations is carried out each year. This analysis compares each student's achievement to expectations based on a range of data; including standardised-test scores, school achievement records, and teacher knowledge and opinion. High quality action planning for the subject is informed by this analysis as well as by teachers' self-reflection.
- Planning for numeracy is very well embedded in the school's school self-evaluation (SSE) process. The numeracy link teacher has provided valuable training to the whole staff on effective numeracy strategies. Very good use is made of the Professional Development Service for Teachers (PDST) mathematics competency test in gathering baseline data and evaluating improvement.

#### **4. CHILD PROTECTION**

During the evaluation, the following checks in relation to the school's child protection procedures were conducted:

1. The school principal is aware that revised child protection procedures for primary and post-primary schools came into effect on 11 December 2017 and arrangements are in place to begin the process of implementing these procedures.
2. The name of the designated liaison person for child protection matters was prominently displayed in the school's reception area.
3. The school has a Child Safeguarding Statement in place.
4. All teachers are aware that they are mandated persons and of their responsibilities in that regard.

The school met the requirements in relation to each of the checks above.

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 in writing on the findings and recommendations of the report, and the response of the board will be found in the appendix of this report.

# **Appendix**

**SCHOOL RESPONSE TO THE REPORT**

**Submitted by the Board of Management**

**Part A Observations on the content of the inspection report**

The Board of Governors of Sandford Park School welcomes this report's observations on the quality of teaching and learning, the very good practices in subject provision, whole school support for Mathematics and the very good quality of planning for Mathematics.

**Part B Follow-up actions planned or undertaken since the completion of the inspection activity to implement the findings and recommendations of the inspection.**

The Board of Governors is committed to the implementation of the recommendations contained in the report.



## 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;