

An Roinn Oideachais agus Scileanna
Department of Education and Skills

Curriculum Evaluation
Mathematics

REPORT

School name	Saint Francis Senior National School
School address	Clonshaugh Drive Priorswood Dublin 17
Roll number	19668Q

Date of Evaluation: 22-05-2017



WHAT IS A CURRICULUM EVALUATION?

Curriculum Evaluations report on the quality of teaching and learning in specific subjects of the *Primary School Curriculum* (1999). 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. Quality of pupils' learning
2. Supporting pupils' learning through learning experiences and teachers' practice
3. The effectiveness of school planning, including SSE, in progressing pupils' learning

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.

The board of management 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.

Curriculum Evaluation

INSPECTION ACTIVITIES DURING THIS INSPECTION

Date of inspection	22-05-2017
Inspection activities undertaken <ul style="list-style-type: none">• Discussion with principal and teachers• Review of relevant documents• Pupil focus-group interview	<ul style="list-style-type: none">• Observation of teaching and learning• Examination of pupils' work• Interaction with pupils• Feedback to principal and teachers

SCHOOL CONTEXT

An evaluation of Mathematics was undertaken in Saint Francis' Senior National School in May 2017. This report is based on a selection of lessons observed in a range of learning settings in the school, interaction with pupils and review of their work, meetings with the principal and teachers and a review of relevant documentation and assessment data.

Saint Francis' Senior National School operates under the patronage of the Roman Catholic Archbishop of Dublin. It participates in the Department of Education and Skills' Delivering Equality of Opportunity in Schools (DEIS) programme and receives support from the School Completion Programme. Currently, there are 171 pupils enrolled across nine mainstream classes.

SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

FINDINGS

- Overall, the quality of pupils' learning achievements across all strands of the mathematics curriculum is satisfactory with further improvements achievable.
- Pupils' learning experiences in Mathematics were good with some highly effective provision noted.
- Overall, there was a very high standard in the teaching of Mathematics in the lessons observed.
- The enjoyment of Mathematics is promoted by all teachers.
- Assessment practices are good.
- While planning in Mathematics is commendable overall, the development of whole-school achievement targets is required as a key element within the DEIS planning process.

RECOMMENDATIONS

- Through collaborative learning in regularly reconfigured mixed-ability groupings, pupils should be further enabled to achieve in line with their abilities across all strands of the mathematics curriculum.
- The school's DEIS action plan for numeracy should clearly outline targets for overall improvement in attainment levels.

DETAILED FINDINGS AND RECOMMENDATIONS

1. THE QUALITY OF PUPILS' LEARNING

Overall, the quality of pupils' learning in Mathematics is satisfactory, as is also evidenced in standardised test data. Pupils have a good ability in word problem solving and are provided with

beneficial opportunities to apply the strategies they have learned to real-life contexts. Pupils in all classrooms enjoy their learning. There is a good balance in provision for pupils to work independently and to collaborate with others in their learning. There is evidence of progression in pupils' learning outcomes across some strands such as Data and Chance, Measures and Shape and Space. However, progression in learning is not consistent across all the strands of the mathematics curriculum and there is need to challenge pupils to achieve more, in line with their abilities.

Pupils understand and use appropriate mathematical language and are able to communicate their learning satisfactorily. During the evaluation, a majority of pupils was able to justify and explain their methods confidently when reasoning, estimating and problem solving. There was, however, further potential for pupils to connect all the different aspects of their mathematics learning; they should be provided with purposeful and consistent opportunities to develop their skills in all strands in this regard. Pupils' computational skills were not sufficiently precise overall. There is room to improve this aspect of learning, particularly in the computation of Measurement and Shape and Space and especially among more-able pupils.

2. SUPPORTING PUPILS' LEARNING: LEARNING EXPERIENCES AND TEACHERS' PRACTICE

Overall, pupils' learning experiences in Mathematics in the lessons observed were good with some highly effective provision noted. The classroom environments promote Mathematics successfully and pupils have access to a wide range of resources, including manipulatives, calculators and the environment itself. They have regular opportunities to engage in mathematics activities, games and mathematics trails linking learning to real-life situations. Pupils use most resources effectively to support their understanding. The use of information and communication technologies should become a more consistent feature of their learning experiences.

Overall, there was a very high standard of teaching of Mathematics in the lessons observed. Teachers' collective practice has been very effective in identifying methodologies appropriate to the learning styles of pupils. During the evaluation, teachers worked in a very skilful manner providing meaningful opportunities for pupils to solve various types of problems. They taught appropriate mathematical language explicitly. Lessons were very well structured and agreed whole-school approaches, in mental mathematics and problem solving in particular, were evident from classroom to classroom. Teachers use assessment data to identify pupils for small-group instruction within class levels. This practice should be refined further to identify pupils for instruction in specific areas of the mathematics curriculum. Any identified pupil groups should be reconfigured very regularly and any approach undertaken should incorporate a greater amount of in-class teaching and should promote mixed-ability approaches and collaborative learning in whole-class settings. The enjoyment of Mathematics is promoted by all teachers.

Assessment practices are good. A substantial range of standardised and ability level data is available and collated. Teachers examine pupils' knowledge of tables regularly and employ termly assessments in all other areas. Analysis of these data should now be used to identify cohorts of pupils for differentiated group instruction in each strand of Mathematics and to identify more regular opportunities for mixed-ability and whole-class instructional experiences.

3. THE EFFECTIVENESS OF SCHOOL PLANNING, INCLUDING SSE, IN PROGRESSING PUPILS' LEARNING

Whole-school planning in Mathematics is good. Plans outline content and methodologies clearly for each class level. At the classroom level, agreed approaches to promoting mathematical language

acquisition and assessment strategies are implemented effectively. Learning targets have been identified for pupils' learning of time and mental mathematics; this will be most beneficial in advancing progressive learning in these two areas. Further development of the school's DEIS action plan in respect of numeracy is required as there is need to identify specific whole-school targets for improvement in attainment in all strands. Teachers' individual classroom plans are very detailed and inform individual and collective practice successfully. Such careful classroom planning by teachers is resulting in positive learning experiences for pupils in many strands of the mathematics curriculum.

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 Management of St. Francis Senior National School welcomes this comprehensive and constructive curriculum evaluation report and views it as a very positive affirmation of the high quality of teaching and level of pupil enjoyment of mathematics in our school.

The Board wishes to acknowledge the collective efforts of the entire school community in bringing about this outcome.

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

We accept the recommendations of the report and will endeavour to implement them through a process of regular whole-school consultation, collaboration and review of pupil progress and attainment levels.

THE INSPECTORATE'S QUALITY CONTINUUM

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;