An Roinn Oideachais agus Scileanna
Department of Education and Skills

Curriculum Evaluation
Mathematics

REPORT

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<th>Aínm na scoile / School name</th>
<th>Saint Columba’s National School Mixed</th>
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| Seoladh na scoile / School address | North Strand  
|                               | Dublin 3                               |
| Uimhir rolla / Roll number    | 14463T                                |

Date of inspection: 16-11-2017
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(s) evaluated learning and teaching in Mathematics under the following headings:

1. Quality of pupils’ learning
2. Supporting pupils’ learning through learner 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

Date of inspection: 16-11-2017

Inspection activities undertaken:

- Discussion with principal and teachers
- Review of relevant documents
- Pupil focus-group interview
- Observation of teaching and learning
- Examination of pupils’ work
- Interaction with pupils
- Feedback to principal and teachers

SCHOOL CONTEXT

Saint Columba’s National School is a co-educational primary school for pupils from junior infants to sixth class. Staffing includes four mainstream class teachers and two support teachers for pupils with additional learning needs. The school operates under the patronage of the Church of Ireland Archbishop of Dublin. There are 120 pupils enrolled currently.

SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

FINDINGS

- The overall quality of pupils’ learning in Mathematics is very good; pupils demonstrate a praiseworthy ability to reason, to clarify their mathematical thinking and to question.
- A special education teacher is currently inappropriately deployed to teach Mathematics to a mainstream class grouping.
- The quality of assessment is satisfactory overall; however, in some lessons observed, insufficient use is made of assessment data to underpin classroom provision for differentiation.
- Teaching is very good overall, with examples of exemplary individual practice observed.
- In their own classrooms, school leaders demonstrate a commitment to best practice in the teaching and learning of Mathematics; there is potential for these teachers to develop the leadership of teaching and learning further, through the modelling of best practice.
- The quality of school planning and school self-evaluation in Mathematics is good.

RECOMMENDATIONS

- The board of management should ensure that all teachers are deployed in compliance with Circular 0013/2017.
- Assessment data should be further used to better meet the full range of pupil-ability levels.
- Curriculum leadership roles in Mathematics should be developed further to support the sharing of best practice and the extension of team teaching.

DETAILED FINDINGS AND RECOMMENDATIONS

1. THE QUALITY OF PUPILS’ LEARNING

The overall quality of pupils’ learning in Mathematics is very good. In the lessons observed and in the course of interactions, pupils presented as enthusiastic and highly motivated learners. They discuss their learning in Mathematics confidently with precise mathematical language and demonstrate a praiseworthy ability to reason, clarify their mathematical thinking and to question. Pupils show a highly commendable ability to apply their knowledge of relevant mathematical concepts and procedures to a variety of appropriate contexts, including real-life situations. Attainment in standardised tests is generally very good. During the focus-group discussion held with middle and
2. SUPPORTING PUPILS’ LEARNING: LEARNER EXPERIENCES AND TEACHERS’ PRACTICE

Pupils are afforded opportunities to engage in a very good range of learning experiences. They are facilitated to work both independently and collaboratively. Their contributions to lessons are encouraged and valued. Pupils are enabled to analyse, discuss and assess their own work and the work of others; the development of learning logs to allow pupils to reflect critically on their learning in Mathematics would further enhance provision. In the focus group, pupils described how they are given opportunities to integrate and connect different aspects of their learning in Mathematics.

Teaching is very good overall, with some exemplary individual practice in evidence. In all observed lessons, teachers explained concepts clearly and facilitated purposeful active learning. All teachers place a very good emphasis on the teaching and consolidation of topic-specific language in Mathematics. In a few lessons, the learning activities were not differentiated sufficiently for the varying range of pupils’ abilities and more strategic use should have been made of teacher questioning to guide and gauge pupils’ learning. Where best practice was observed, pupils actively engaged in appropriately challenging mathematical investigations, which facilitated optimal pupil participation and the shared construction of their learning; all teachers should develop their teaching approaches to facilitate this differentiated, pupil-led exploratory learning. Very good examples of the explicit teaching of higher-order mathematical thinking skills were observed. There is potential to develop the leadership of teaching and learning in Mathematics through the extension of team teaching and the modelling of best practice. The decision to partially deploy a support teacher to a mainstream setting is inappropriate and the board of management should ensure that all teachers are deployed in compliance with Circular 0013/2017.

The quality of assessment is satisfactory overall. A range of assessment practices is used including standardised assessments, checklists and termly tests. Pupils’ written work is monitored carefully and pupils are provided with constructive written feedback. In a significant minority of lessons observed, however, insufficient use was made of assessment data to underpin classroom provision for differentiation. In these instances, there is a need for teachers to use a wider range of classroom assessment strategies to regularly assess understanding and skills, and to use this information to inform future mathematics work. Further analysis of pupil attainment from standardised tests should be undertaken to track pupil progress on an annual basis and to ensure that pupil attainment is commensurate with ability levels. Diagnostic assessment should be used, where relevant, to support the identification of pupils’ particular learning needs in Mathematics.

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

The quality of school planning in Mathematics is good. Pupils are provided with a broad and appropriate learning programme in Mathematics. The school plan for Mathematics outlines whole-school approaches to the language of Mathematics, problem-solving and number facts. It is well organised and informs teaching and learning in the school effectively.

The school reported that it is not engaging currently in the school self-evaluation process due to ongoing industrial action. However, there is evidence that previously agreed targets and actions, related to the development of pupils’ problem-solving skills and their use of mathematical language, are having a positive impact on teaching and learning in classrooms.
Teachers’ individual planning for the subject is of a good quality and outlines a range of curriculum objectives and purposeful activities. While teachers’ short-term planning is generally successful in specifying mathematical content to be covered, it would be enhanced by the further delineation of intended learning outcomes and skills according to pupil-ability levels.

4. CHILD PROTECTION

The following aspects of the Child Protection Procedures for Primary and Post Primary Schools were checked during the evaluation:

1. Teachers’ access to a copy of the school’s Child Protection policy
2. The prominent display of the name of Designated Liaison Person near the main entrance

The school was fully compliant with both aspects.
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 and school community are very pleased to receive such a positive report in respect of the teaching and learning of mathematics in our school. This is a vindication of the dedication of the staff and the hard work of our children and their families.

The observations recorded in this report indicate that the strategies employed in the delivery of the mathematics curriculum in the school have been very successful, particularly as the school has gone through a period of rapid growth. It is especially pleasing to note the positive attitude towards mathematics throughout the school.

The recommendations in the report are being taken on board by the school leaders and the actions to be taken in light of those recommendations are outlined in Part B of the school response.

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

a) The Board acknowledges the direction of circular 13/2017 and realises now that this practice should not be happening in our school. Direction has been given for the practice to stop.

b) The school engages in continuous monitoring of attainment in mathematics through standardised tests, maths programme and teacher-designed tests and teacher observation. The school is currently exploring how best to collate and apply these results and observations to inform both long and short-term planning on an individual pupil, class and whole school basis.

c) The school leadership team are very aware of the importance of the sharing of best practice in the teaching of mathematics. To that end, the school has developed a culture of co-operative teaching through the sharing of resources through the school ICT system and the modelling of teaching through the Droichead system of teacher induction. In addition, the school has engaged with PDST (Professional Development Service for Teachers) including participation in a number of in-service activities in support of team teaching.
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.

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<tr>
<th>Level</th>
<th>Description</th>
<th>Example of descriptive terms</th>
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<td><strong>Very Good</strong></td>
<td><strong>Very good</strong> 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.</td>
<td>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</td>
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<td><strong>Good</strong></td>
<td><strong>Good</strong> 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.</td>
<td>Good; good quality; valuable; effective practice; competent; useful; commendable; good standard; some areas for improvement</td>
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<td><strong>Satisfactory</strong></td>
<td><strong>Satisfactory</strong> 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.</td>
<td>Satisfactory; adequate; appropriate provision although some possibilities for improvement exist; acceptable level of quality; improvement needed in some areas</td>
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<td><strong>Fair</strong></td>
<td><strong>Fair</strong> 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.</td>
<td>Fair; evident weaknesses that are impacting on pupils’ learning; less than satisfactory; experiencing difficulty; must improve in specified areas; action required to improve</td>
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<td><strong>Weak</strong></td>
<td><strong>Weak</strong> 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.</td>
<td>Weak; unsatisfactory; insufficient; ineffective; poor; requiring significant change, development or improvement; experiencing significant difficulties;</td>
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