Curriculum Evaluation
Mathematics

REPORT

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<th>Ainm na scoile / School name</th>
<th>Knockaderry N S</th>
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<td>Seoladh na scoile / School address</td>
<td>Farranfore</td>
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<td>Killarney</td>
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Date of inspection: 07-02-2019
HAT 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 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 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.

CHILD PROTECTION

During the inspection visit, the following checks in relation to the school’s child protection procedures were conducted:
1. The name of the DLP and the Child Safeguarding Statement are prominently displayed near the main entrance to the school.
2. The Child Safeguarding Statement has been ratified by the board and includes an annual review and a risk assessment.
3. All teachers visited reported that they have read the Child Safeguarding Statement and that they are aware of their responsibilities as mandated persons.

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

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

**CONTEXT**
Knockaderry national school is a mainstream Catholic school situated in the village of Farranfore, Co. Kerry. It has a staff of three mainstream teachers and two special education teachers. There are 74 pupils currently enrolled in the school.

**SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:**

**FINDINGS**
- The quality of pupil learning across all strands of the Mathematics curriculum is very good: pupils attaining to very high levels would benefit from the organisation of more challenging learning opportunities.
- The quality of support for pupils’ learning in all settings is very good: pupils see Mathematics as practical and relevant and they can apply their mathematical understanding and skills to real life.
- Very high quality teaching was observed during the evaluation and learning experiences provided to pupils are of a very high standard.
- The quality of assessment is good and pupil progress is monitored at regular intervals; more effective use could be made of strand-specific data to inform teacher practice and the organisation of support.
- School planning, including school self-evaluation (SSE), is very effective in progressing pupils’ learning and teachers’ collective practice is a significant strength in the school.

**RECOMMENDATIONS**
- The school should explore opportunities to further extend the learning of pupils who achieve to very high levels and provide suitably challenging learning experiences for these accelerated learners.
- Strand-specific data generated from standardised assessments should be used more effectively to inform future organisation of support interventions and planning for differentiation within the classroom.
DETAILED FINDINGS AND RECOMMENDATIONS

1. THE QUALITY OF PUPILS’ LEARNING

- The quality of pupil learning across all strands of the Mathematics curriculum is very good. Pupils’ understanding of number and their ability to complete mental calculations is very impressive and is systematically developed as they progress through the school. Through their exploration of algebra, they demonstrate a deep awareness of mathematical rules and properties and a commendable ability to apply these rules when problem solving. Pupils’ written work indicates that they are provided with opportunities to regularly collect, organise and represent data using pictograms, graphs and charts. When engaging with measures, pupils’ ability to estimate, compare, measure and record their learning is very good and they can apply their learning to practical tasks. Pupils’ active exploration of shape and space has enabled them to acquire a deep understanding of spatial awareness and they can recognise, classify, measure and describe the properties of lines, angles, and two-dimensional and three-dimensional shapes.
- In the course of a focus group interview, pupils displayed a commendable ability to describe their learning using appropriate mathematical language. They outlined how real life situations and the environment are used to provide the context for mathematical activities. Of note was their ability to link and integrate their learning across the mathematical strands and with other subject areas.
- In the infant classes, very impressive focus is placed on providing pupils with opportunities to engage in early mathematical activities through play and talk and discussion.
- Given the number of pupils who achieve to very high levels, it is recommended that the school explore opportunities to extend their learning and provide suitably challenging learning experiences for accelerated learners.

2. SUPPORTING PUPILS’ LEARNING: LEARNER EXPERIENCES AND TEACHERS’ PRACTICE

- The quality of support for pupils’ learning in all settings is very good. Learning experiences provided to pupils are of a very high standard. Activities which allow for guided discovery and activity methods are consistently provided. Pupils are provided with regular opportunities to work cooperatively. Concrete materials are skilfully used to enable them to see Mathematics as practical and relevant and to construct and apply their mathematical understanding and skills to real life. Mathematics is effectively integrated with other subject areas, particularly Geography and Physical Education. In lessons observed, pupils were active participants in the learning process. They were facilitated to construct meaning by making links between new and existing knowledge. Facilitating pupils to engage more frequently with information and communication technologies to enhance their learning experiences is advised.
- Very high quality teaching was observed during the evaluation. Supportive displays were in evidence in all classrooms. Teachers use a wide range of methodologies and care is taken to build on pupils’ previously acquired knowledge. Mathematical concepts are explored in a logical and developmental manner. Planning for Mathematics is undertaken by all teachers and the teaching of Mathematics is approached with enthusiasm in all classes. Lessons are very well structured, stimulating and interesting.
- Pupils with additional learning needs are well supported. There is a co-ordinated approach between the class teacher and the special education team in the provision of supports for pupils with learning difficulties. Identified needs are addressed through a combination of teacher differentiation, in-class support and withdrawal of pupils individually and in groups.
The quality of assessment is good. Pupil progress is monitored at regular intervals through observation, monitoring of pupils’ written work and teacher-designed tests. Teachers identify strengths and weaknesses in attainment from assessment records and plan accordingly. The outcomes of assessment, especially the strand-specific data generated from standardised assessments, should be used more effectively to inform future organisation of support interventions and planning for differentiation within the classroom.

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

- School planning, including SSE, is very effective in progressing pupils’ learning. The recently reviewed whole-school Mathematics plan gives very good direction to teachers on the delivery of a broad and balanced curriculum and in outlining agreed whole-school approaches to the teaching of Mathematics.
- The school’s engagement in the SSE process has resulted in significant improvements in the quality of teachers’ individual and collective practice and has impacted positively on pupil learning-experiences and learning outcomes. Teacher collaboration is a significant strength in the school. They regularly engage in reflective practices and in the sharing of expertise. Initiatives aimed at bringing about improvement in numeracy have been effectively piloted, monitored, evaluated and embedded into practice.
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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<th>Level</th>
<th>Description</th>
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<td>Very Good</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 <strong>outstanding</strong> 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>Good</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>Satisfactory</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>Fair</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>Weak</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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Appendix

TO THE REPORT

Submitted by the Board of Management
Part A: Observations on the content of the inspection report

The Board of Management welcomes the very positive inspection report and the very high standards acknowledged therein. It is very pleased to have the school's great progress confirmed through this evaluation. In particular, the board is very pleased with the following findings taken from the report:

- The quality of pupil learning across all strands of the Mathematics curriculum is very good.
- The quality of support for pupils' learning in all settings is very good.
- Very high-quality teaching was observed and learning experiences provided to pupils are of a very high standard.
- Very impressive focus is placed on providing pupils with opportunities to engage in early mathematical activities through play and talk and discussion.
- School planning, including school self-evaluation, is very effective in progressing pupils' learning.
- Teachers' collaborative practice is a significant strength in the school.

We are confident that this report will inspire all to continue to provide top-level education to the pupils. The board is especially pleased to read the positive reference made to the many high-achieving pupils in the school.

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 school is looking forward to addressing the two recommendations contained in the report and to enhancing further, the educational experience of the pupils in Knockaderry NS. In particular, the principal and staff welcome the opportunity now presented to further challenge and extend the learning of our high achieving children. An extended range of content and approaches will be researched and implemented to ensure that all pupils, of all abilities, continue to aspire to higher standards and achieve their full potential.

With this in mind, strand-specific data will continue to be reviewed within the Mathematics curriculum to further develop differentiated opportunities for all. Digital learning experiences have been prioritised, aided by the board's commitment to investing further in ICT to enhance the learning experiences for all pupils, at all levels, and guide them towards reaching their full potential.