An Roinn Oideachais agus Scileanna
Department of Education and Skills

Curriculum Evaluation
Science

REPORT

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<tr>
<th>Ainm na scoile / School name</th>
<th>Riverstown N S</th>
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<tr>
<td>Seoladh na scoile / School address</td>
<td>Glanmire</td>
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<td></td>
<td>Co Cork</td>
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<td>Uimhir rolla / Roll number</td>
<td>13747F</td>
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Date of Evaluation: 07-02-2017
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 Science in the school.

HOW TO READ THIS REPORT
During this inspection, the inspectors evaluated learning and teaching in Science 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 Science.

The board of management of the school was given an opportunity to comment on the findings and recommendations of the report; the board chose to accept the report without response.
Curriculum Evaluation

INSPECTION ACTIVITIES DURING THIS INSPECTION

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| Inspection activities undertaken | • Observation of teaching and learning  
• Examination of pupils’ work  
• Interaction with pupils  
• Feedback to principal and teachers |

| • Discussion with principal and teachers | |
| • Review of relevant documents | |
| • Pupil focus-group interview | |

SCHOOL CONTEXT
Riverstown NS is a co-educational, vertical primary school under the patronage of the Catholic Bishop of Cork and Ross. The school has twenty-six mainstream class teachers and a further twelve teachers work in support settings. It has two special classes for pupils with autistic spectrum disorders (ASD). Sampling of classroom visits in this school of 724 pupils, resulted in the evaluation of fifteen mainstream classes and one special class.

SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

FINDINGS
• The learning achievements of the pupils are of a very high standard.
• The overall quality of teaching is very good.
• While many pupils demonstrate good capacity to use scientific language to describe their learning, there is scope to develop the pupils’ language capacity in a more systematic manner.
• Attainment in Science is assessed primarily by the use of teacher observation and teacher designed tasks.
• The principal, in-school management and the science co-ordinator provide very clear guidance and direction for high quality learning.
• The quality of school planning for Science is very good.

RECOMMENDATIONS
• The school should extend the use of practices that support assessment-for-learning in classrooms, including the use of diagrams, mind maps and objective based-checklists.
• Action should be taken to support progression in the development of the pupils’ scientific language skills at each class level.

DETAILED FINDINGS AND RECOMMENDATIONS

1. THE QUALITY OF PUPILS’ LEARNING IN SCIENCE
The quality of the pupils’ learning in Science is very good. Their knowledge, skills and understanding are at a very good standard. Pupils’ views are regularly sought during classroom activity. Their communicative skills are very well developed and many pupils demonstrate good ability to use scientific language. The school is advised to document core language to be taught at each class level.
All pupils have opportunities to work as scientists and partake in practical investigations and research. They work in collaborate groups where clearly defined roles are assigned to individual pupils. An emphasis on scientific skills is a prominent feature of very good classroom practice. Pupils are enabled to question, to see patterns and to arrive at hypotheses. The concept of fair testing is well established. They can use and apply their scientific skills to design and make a variety of experiments and models that provide solutions to practical problems. The pupils demonstrate a high level of motivation and they enjoy engaging and persisting with increasingly challenging work.

The pupils are confident in their knowledge of Science and in their ability to work as scientists. Pupils who participated in the focus group discussion stated that Science was fun and that they enjoyed engaging with experiments and investigations.

2. SUPPORTING PUPILS’ LEARNING IN SCIENCE: LEARNING EXPERIENCES AND TEACHERS’ PRACTICE

The quality of teaching is very good. Teachers provide high quality, well planned learning experiences for all pupils. Teachers employ a scientific approach to problem solving which emphasises understanding and constructive thinking. While commendable efforts are made to achieve a balance between the skills of working scientifically and designing and making, there is scope to place renewed whole-school emphasis on designing and making to further advance the pupils’ skill set in Science.

Teachers are successful in adapting their teaching to meet the needs of most pupils within the classroom. The school is commended for its recent introduction of an enrichment programme to extend and to challenge learning for more able pupils. A noted feature of very good practice is the current emphasis on engineering in middle and senior classes.

Stimulating and well-resourced indoor and outdoor learning environments support the pupils’ learning. They enjoy frequent opportunities to engage in field trips. Outdoor facilities include the courtyard, an tigín gréine and a bug hotel. These facilities allow the pupils to actively progress their learning on plant and animal life. The school garden provides a valuable resource to explore the concept of growth and gardening. Currently, active gardening-work is confined to certain class levels. Teachers should identify opportunities to allow for more pupils to exploit this valuable resource.

Parental expertise and frequent visits from science professionals provide valuable support to the pupils in their learning.

Teacher observation and teacher designed tasks are utilised to assess pupils’ progress. Very effective assessment practice was noted in some classrooms where progress is recorded through the use of diagrams, mind maps and objective based-checklists. This very good practice should be extended on a whole-school basis and used to support assessment-for-learning.

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

The quality of school planning for Science is very good. The whole-school plan links with and influences teaching and learning in individual classrooms. It provides effective guidance on all aspects of the science programme. The plan includes provision for school trails, recommends investigations for each class level incorporating all curricular strands and provides a detailed inventory of all available resources. The teachers are complimented on the recent review process whereby feedback from all
teachers informed the revised plan, making it more accessible and more useful. The central role of the principal, in-school management and the science co-ordinator in the continued progression of teaching and learning in Science is praised highly.

**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 the school’s provision of each area.

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<th>Level</th>
<th>Description</th>
<th>Example of descriptive terms</th>
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<td>Very Good</td>
<td><em>Very good</em> 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 <em>outstanding</em> 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><em>Good</em> 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 <em>very good</em> 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><em>Satisfactory</em> 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><em>Fair</em> 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><em>Weak</em> 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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