

An Roinn Oideachais agus Scileanna
Department of Education and Skills

Subject Inspection in Science & Chemistry

REPORT

Ainm na scoile / School name	Seamount College
Seoladh na scoile / School address	Kinvara County Galway
Uimhir rolla / Roll number	63050T

Date of Inspection: 13-02-2019



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agus Scileanna
Department of
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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.

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.

HOW TO READ THIS REPORT

During this inspection, the inspector evaluated learning and teaching in Science & Chemistry 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.

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.

SUBJECT INSPECTION

INSPECTION ACTIVITIES

Date(s) of inspection	13-02-2019
Inspection activities undertaken <ul style="list-style-type: none">• Review of relevant documents• Discussion with principal and key staff• Interaction with students	<ul style="list-style-type: none">• Observation of teaching and learning during three class periods• Examination of students' work• Feedback to principal, deputy principal and relevant staff

School context

Seamount College is a co-educational post-primary school under the trusteeship of the Catholic Bishop of Galway. Its enrolment is 490 students currently. In addition to the Junior Cycle programme the school offers an optional Transition Year programme, the Leaving Certificate and the Leaving Certificate Vocational Programme.

SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

Findings

- The overall quality of teaching and learning was very good with very high levels of individual support by teachers for students' learning evident in all lessons.
- There are very high levels of professional collaboration and collegiality among the science staff; this will support further development of the use of peer collaborative review.
- Subject provision and whole-school support for the sciences are good, with the teachers' commitment to supporting science-related extra-curricular activities being highly commendable; the school's work in respect of developing a digital platform and the acquisition of devices will further support students' learning.
- Planning was of good quality overall, with very good work done in elucidating the learning outcomes for the junior cycle specification in Science; there is potential to develop the use of digital plans.
- The integration of school self-evaluation priorities within the subject departments' planning and the use of end-of-year reflections are commendable practices.

Recommendations

- In building on the supportive team approach taken by the science staff, the use of peer collaborative review should be further extended and would support the teachers' work in the ongoing sharing of teaching and learning strategies.
- The school should prioritise completion of its digital learning plan to ensure optimal availability of infrastructure and devices to support teaching and learning.
- The science teachers should build on the good work they have done in developing their existing plans by migrating these to a digital format and sharing them with students as learning resources.

DETAILED FINDINGS AND RECOMMENDATIONS

1. TEACHING, LEARNING, AND ASSESSMENT

- The overall quality of teaching and learning was very good. It was characterised in all lessons by a very high level of support by the teachers for each student as an individual.
- In all lessons, the teachers demonstrated suitable levels of subject knowledge. All lessons had been well prepared, with the quality of lesson preparation ranging from excellent to good. Beneficially, each lesson had, at its core, opportunities for students to be active in their learning.
- A variety of teaching approaches was observed and these included the use of questioning, digital technology by the teacher, pair and group work, teacher instruction, student experimental work, short written exercises, the creation of posters, and a variety of topical and current activities, such as composing tweets, that engaged the students.
- A suitable variety of question types was used in almost all lessons. Where questioning was used best, it involved the teacher asking a question, giving the students sufficient time to think, listening to the students' individual responses, asking follow-up questions to extend their responses, and checking their understanding. Where there was scope to improve questioning, adopting such an approach is recommended.
- Commendably, all lessons provided opportunities for students to contribute their personal views on the topics taught. Teachers were highly responsive to students' individual learning needs, and discussions between the inspector and teachers indicated that the teachers knew each student and their abilities.
- The management of lessons was very good in two lessons but required action for improvement in one lesson. Best practice in lessons was characterised by procedures that ensure that all students are listening and engaged when instructions are being given and by the teacher checking for understanding before the students begin work.
- Discussions with students revealed that they held positive attitudes to the sciences. There was evidence of these attitudes being fostered by the teachers who held high expectations for their students.
- In all lessons, relationships were very positive. When working together, the students demonstrated suitable team-working skills.
- The science teachers have engaged in peer collaborative review to support each other and to facilitate the sharing of teaching and learning strategies. In addition, the school has introduced co-teaching this year. In building on the science department's supportive team approach, the use of peer collaborative review should be further extended.
- Discussions with students revealed that they had, relative to their abilities, good knowledge and understanding of the topics under study. Analysis of students' attainment in the State examinations in Science and in Chemistry showed that students tend to perform very well in these subjects and that the uptake at the higher levels is very good.
- Students reported receiving regular homework and this was also evident from the sample of copybooks that was viewed. The copybooks showed evidence of regular correction of students' work and feedback from their teachers. It was noteworthy that homework exercises for some lessons were particularly innovative and engaging, with a variety that would appeal to a range of interests and aptitudes.
- During lessons, students received extensive oral feedback from their teachers. Particularly good practice was noted where lesson activities used success criteria, which made clear to the students the things they needed to accomplish. Additionally, peer assessment was a feature of some lessons and this was used very effectively to support students in learning from each other's work.

2. SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- Subject provision and whole-school support for the sciences are good.
- A wide range of science subjects is offered by the school. The teachers' dedication to supporting students in studying the sciences is shown, for example, by teachers taking students for tuition in their own time.
- The time allocated to Science and to Chemistry meets with the respective subject guidelines.
- There is very good support for the teachers' continuing professional development (CPD) and very good engagement by the teachers in CPD.
- The preparation area is well organised. It was clear that the science teachers have done considerable work in organising the area. There are two science laboratories, one of which is of more recent construction and fit-out. The laboratories had a considerable number of scientific charts, posters and work by the students on display, helping to create a scientific learning space. The minutes of subject department meetings showed that the science teachers are mindful of maintaining and updating the physical learning environment. The priorities identified by the teachers should be actioned by the school at the earliest opportunity.
- The school is developing its digital learning plan currently. At the time of this evaluation, the school's focus was on developing the use of apps and providing suitable training for teachers. There were also plans to upgrade the second computer laboratory and to extend the school's Wi-Fi network. The school should prioritise completion of its digital learning plan with a view to ensuring optimal availability of infrastructure and devices to support teaching and learning.
- Students' participation in a very wide range of science-related extra-curricular activities is facilitated by the science teachers. The commitment and dedication of the science teachers in doing this are highly commendable.

3. PLANNING AND PREPARATION

- Overall, good-quality planning was observed, with elements of very good quality. In particular, teacher collegiality and collaboration are significant strengths of the science department.
- The subject department plans showed that the science teachers have completed considerable work in planning for their subjects. Especially, very good work has been done in elucidating the learning outcomes for Science at junior cycle.
- School self-evaluation actions have permeated the subject department plans and this is commendable. Another very good practice noted during the evaluation was the use of an end-of-year reflection sheet, which is an aid to planning for the next year.
- The teachers have given extensive consideration to selecting a suitable textbook for use at junior cycle. Given the very good work done in compiling the subject plan, it is recommended that the teachers migrate their plan to digital format and share it with the students. The plan has, because of its quality, significant potential to become the students' main learning and reference material.

The draft findings and recommendations arising out of this evaluation were discussed with the principal, deputy principal and subject teachers at the conclusion of the evaluation.

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
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;