



An Roinn Oideachais  
Department of Education

# Subject Inspection: Applied Technology and Technology REPORT

Ainm na scoile/School name	St Mary's Knockbeg College
Seoladh na scoile/School address	Knockbeg Co. Carlow
Uimhir rolla/Roll number	61130H
Dáta na cigireachta/ Date of evaluation	11/03/2025
Dáta eisiúna na tuairisce/ Date of issue of report	03/06/2025

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# What is a 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.

## How to read this report

During this inspection, the inspector(s) evaluated learning and teaching in Applied Technology and Technology 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.

Included in this subject inspection report is a student-friendly page that provides information for the children/young people in your school about the inspection that occurred recently. It outlines for them some of the main findings and recommendations.

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.

## Actions of the school to safeguard children and prevent and tackle bullying

During the inspection visit, the following checks in relation to the school's child protection and anti-bullying procedures were conducted:	
<i>Child Protection</i>	<i>Anti-bullying</i>
<ol style="list-style-type: none"><li>1. The name of the DLP and the Child Safeguarding Statement are prominently displayed near the main entrance to the school.</li><li>2. The Child Safeguarding Statement has been ratified by the board and includes an annual review and a risk assessment.</li><li>3. All teachers visited reported that they have read the Child Safeguarding Statement and that they are aware of their responsibilities as mandated persons.</li></ol>	<ol style="list-style-type: none"><li>1. The school has developed an anti-bullying policy that meets the requirements of the <i>Anti-Bullying Procedures for Primary and Post-Primary Schools (2013)</i> or <i>Bí Cineálta (2024)</i> and this policy is reviewed annually.</li><li>2. The school's current anti-bullying policy is published on its website and/or is readily accessible to board of management members, teachers, parents and students.</li></ol>

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

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# Subject inspection

<b>Date of inspection</b>	10 <sup>th</sup> -11 <sup>th</sup> March 2025
<b>Inspection activities undertaken</b> <ul style="list-style-type: none"><li>• Review of relevant documents</li><li>• Discussion with principal and key staff</li><li>• Interaction with students, including focus groups</li></ul>	<ul style="list-style-type: none"><li>• Observation of teaching and learning during six lessons</li><li>• Examination of students' work</li><li>• Feedback to principal and relevant staff</li></ul>

## School context

St.Mary's Knockbeg College is a post-primary school for boys, with a current enrolment of 493 students. The school offers the junior cycle, an optional Transition Year (TY) programme, the established Leaving Certificate and the Leaving Certificate Vocational Programme (LCVP).

## Summary of main findings and recommendations:

### Findings

- The quality of teaching and of learning ranged from good to very good; lessons were characterised by good levels of teacher support and affirmation of students' efforts.
- The quality of assessment was good overall; students' response to oral feedback was observed to be a significant strength, good quality written feedback provided to students on their work was noted in a few instances.
- The quality of subject provision and whole-school support was very good; school management was supportive of Applied Technology and Technology and there was a good time allocation provided across junior and senior cycle.
- Lessons were underpinned by high levels of active student participation using a range of learning activities, student led design was underutilised in some lessons.
- More than half of the student population study either Applied Technology or Technology.
- The quality of planning for student learning was good, areas identified for improvement included collaborative planning for differentiation and planning for evidence-based improvements.

### Recommendations

- An absence of sufficient and effective formative feedback on students' work hinders learning progress in some lessons. To resolve this, teachers should increase both the quantity and quality of feedback provided and create opportunities for students to act on that feedback.
- The limited engagement of students in advanced aspects of the design process can restrict their learning and creativity. Going forward teachers should involve students in more complex design tasks and introduce a wider range of engineering materials and techniques.
- The subject department does not have a strategic plan for the advancement of the Technology subjects within the school curriculum. Therefore, the subject department should implement a comprehensive plan that includes documenting evidence-based improvements in student outcomes and experiences, as well as reviewing the Transition Year Technology module.
- Designated safe operation zones should be established around identified machine tools, along with the complete commissioning of floor-mounted equipment.

# Detailed findings and recommendations

## 1. Teaching, learning and assessment

- The quality of teaching and learning in the Applied Technology and Technology lessons ranged from good to very good.
- Learning intentions focussed and supported student learning, lesson content and structure. The level of student input during lesson introductions varied. An increased effort to amplify student input and voice during this stage in the lesson is desirable. Sufficient time for student input was afforded during the conclusion of lessons for students to review and consolidate their learning through a range of exit strategies.
- Students attending the autism class were receiving good levels of support and opportunities to study Applied Technology, in the form of an additional lesson. Going forward the content of this lesson should be more aligned to the work they are completing in the mainstream classes or be used to introduce concepts or procedures they are going to encounter in future lessons.
- Questioning was used extensively in the lessons observed. It provided the teacher with the opportunity to gauge students' learning, to probe their responses and to reinforce recently-learned subject matter. A blend of higher-order and lower-order questions were used to ensure that students of differing competencies were challenged at a level that was appropriate to their development.
- Both the practical and theoretical elements of the specifications were taught in an integrated manner during most lessons observed. This very good practice was also evident in students' written work and copybooks. Supporting students to reflect and act on their learning, teachers should increase the provision and quality of formative feedback on students' work and create opportunities for student reflection and tasks to follow-up on this advice.
- Students were actively engaged in their learning. Their skills were developed and supported appropriately according to their specific needs affording good progress to be made during project work. Teacher circulation among students was very effective, creating time for individual interactions, affirming student endeavour. The immediacy and response by students to oral feedback was a significant strength during lessons.
- Students created sketches to communicate their initial design solutions with some producing good quality prototypes of their final designs. High quality-coloured annotated sketches were noted in some student copybooks. Full scale prototypes should be utilised more frequently by students as a strategy for testing their design concepts and project functionality, by using a wide range of prototyping materials.
- Where students were engaged in practical and design-based activities, high levels of student autonomy and independence were evident. During some lessons student learning was restricted by the provision of prescribed project parts in the form of measured drawings. While this may support some students in designing it will constrain others. Therefore, it will be necessary for teachers to support some identified students with introductory drawings and advice, while allowing others space and time to prototype and model their designs with little intervention.
- Currently the materials and processes students learn about and work with are mainly wood, and polymer based. The practicalities of introducing metals and other materials and their processing methods should be investigated further by the subject department with the aim of introducing such materials and processes in student learning and project work.
- Teachers used a range of effective teaching strategies during lessons, including demonstration, guided instruction and independent student work and collaborative problem solving. To improve the quality of the students' learning experience, teachers should facilitate project work topics and areas that students have identified as interests to them.

## 2. Subject provision and whole school support

- Subject provision and whole school support for technology subjects was very good. Technology subjects receive appropriate time allocations and lessons are scheduled suitably on the school's timetable. Currently the school offers Technology in TY as a 10-week rotation module.
- The Technology specialist room was well equipped and provided students and teachers with a high-quality learning environment. A plan to display a variety of relevant materials and projects to stimulate student interest in the subjects should be planned for. Teachers conduct risk assessments annually and share with school management. Safe operation zones surrounding identified machine tools should be demarked along with the full commissioning of floor mounted tooling.
- Access to Applied Technology and Technology at junior and senior cycle is very good. All first-year students take part in a year-long subject sampling programme. This approach helps to ensure that students make their optional subject choices based upon their experience, aptitude for, and interest in the subjects that they are sampling. This system has resulted in very good uptake at junior and senior cycle.
- Communication of student learning to parents/guardians occurs at eleven-week intervals. Parents/guardians have access to class test scores and attendance through an online platform. A review of reports shows an impressive level of commentary that is descriptive and developmental.
- Support for teachers' professional learning was very good with good records kept of attendance at various national events.

## 3. Planning and preparation

- Planning and preparation for lessons was generally of a good standard, learning activities were designed to support students within the mixed ability class groups. An increase of activities, projects and learning opportunities that challenge more able students should be developed, implemented and reviewed.
- A review of subject department minutes and subject learning assessment review documentation demonstrated the subject departments high level of commitment and drive for high quality provision for their students.
- Yearly schemes were well developed, subject matter was differentiated to some extent and organised clearly with particular focus on learner outcomes. Documented assessment practices provided students with a good variety of methods to demonstrate and assess their learning.
- A review of the TY Technology subject plan is now timely and should include students', teachers and parents/guardians' perspectives in developing a STEM learning experience in TY.
- The detailed analysis of student attainment in certificate examinations, as documented in the subject plan, should now be purposefully utilised to support planning for individual student need, and inform the preparation of materials for lessons.
- The subject department should advance a strategic plan for the development of the Technology subjects, including the documentation of evidence-based improvements as outlined above.

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.



An Roinn Oideachais  
Department of Education

## For the students of St Mary's Knockbeg College about their learning in Applied Technology and Technology

Date of inspection:  
10<sup>th</sup> – 11<sup>th</sup> March 2025

### What kind of inspection did your school have?



A subject inspection was completed in your school. The inspector observed lessons and spoke with the principal and teachers. The inspector met with a group of students to talk to them about their learning in Applied Technology and Technology.

### What were the main findings of the inspection?



- The quality of teaching and of learning ranged from good to very good.
- The quality of assessment was good; students' response to oral feedback was observed to be a significant strength.
- Teachers used a range of activities that supported active student participation. In some lessons student led design was underutilised.
- More than half the student population study either Applied Technology or Technology.

### What did the inspector recommend to make teaching and learning better in Applied Technology and Technology?



- Teachers should increase their explanations to students about what they did well and how they can improve their work. Teachers should create ways for students to then show how they used this advice.
- Teachers should provide opportunities for students to experience deeper levels of designing and use a greater range of engineering materials in the end product.

Thank you for taking the time to read this page.  
Special thanks to the students who participated in the focus group.

## 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.

Level	Description	Examples of descriptive terms
<b>Excellent</b>	<b>Provision that is excellent</b> is exemplary in meeting the needs of learners. This provision provides an example for other schools and settings of exceptionally high standards of provision.	Excellent; exemplary; outstanding; exceptionally high standard; with very significant strengths
<b>Very good</b>	<b>Provision that is very good</b> is very effective in meeting the needs of learners and is of a very high standard. There is potential to build on existing strengths to achieve an excellent standard.	Very good; of a very high quality; very effective practice; highly commendable; very successful
<b>Good</b>	<b>Provision that is good</b> is effective in meeting the needs of learners. There is need to build on existing strengths in order to address the aspects to be developed and achieve a very good standard.	Good; of good quality; effective practice; competent; useful; commendable; good standard; strengths outweigh the shortcomings; appropriate provision although some possibilities for improvement exist
<b>Requires improvement to achieve a good standard</b>	<b>Provision that requires improvement to achieve a good standard</b> is not sufficiently effective in meeting the needs of learners. There is need to address certain deficiencies without delay in order to ensure that provision is good or better.	Fair; less than effective; less than sufficient; evident weaknesses that are impacting on learning; experiencing difficulty; shortcomings outweigh strengths; must improve in specified areas; action required to improve
<b>Requires significant improvement to achieve a good standard</b>	<b>Provision that requires significant improvement to achieve a good standard</b> is not meeting the needs of learners. There is immediate need for significant action to address the areas of concern.	Weak; poor; ineffective; insufficient; unacceptable; experiencing significant difficulties; serious deficiencies in the areas evaluated; requiring significant change, development and improvement to be effective

# **Appendix**

**SCHOOL RESPONSE TO THE REPORT**

**Submitted by the Board of Management**

## **Area 1 Observations on the content of the inspection report**

## **Area 2 Follow-up actions planned or undertaken since the completion of the inspection activity to implement the findings and recommendations of the inspection.**

St Mary's Knockbeg College thanks the Inspector for this report. We were quite pleased with a number of findings, in particular:

- Lessons were characterised by good levels of teacher support and affirmation of students' efforts
- The quality of subject provision and whole-school support was very good; school management was supportive of Applied Technology and Technology and there was a good time allocation provided across junior and senior cycle.
- Lessons were underpinned by high levels of active student participation using a range of learning activities,

In line with recommendations, we have:

The subject department does not have a strategic plan for the advancement of the Technology subjects within the school curriculum. Therefore, the subject department should implement a comprehensive plan that includes documenting evidence-based improvements in student outcomes and experiences, as well as reviewing the Transition Year Technology module.

The subject department have started the process of designing a strategic plan for the advancement of Technology subjects.

- Designated safe operation zones should be established around identified machine tools, along with the complete commissioning of floor-mounted equipment.

Our caretaker has, with assistance from subject department teachers, established safe operations zones around machine tools and physically secured certain machine tools.