An Roinn Oideachais
Department of Education

Subject Inspection: Computer Science
REPORT

Ainm na scoile/School name	Temple Carrig Secondary School
Seoladh na scoile/School address	Temple Carrig Greystones
Uimhir rolla/Roll number	68081J
Dáta na cigireachta/ Date of evaluation	17/01/2025
Dáta eisiúna na tuairisce/Date of issue of report	12/05/2025

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 evaluated learning and teaching in Computer Science 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 on the findings and recommendations of the report; the board chose to accept the report without response.

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

<table>
<tr><td colspan="2">During the inspection visit, the following checks in relation to the school's child protection and anti-bullying procedures were conducted:</td></tr>
<tr><td>Child Protection</td><td>Anti-bullying</td></tr>
<tr><td>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.</td><td>1. The school has developed an anti-bullying policy that meets the requirements of the Anti-Bullying Procedures for Primary and Post-Primary Schools (2013) or Bí Cineálta (2024) and this policy is reviewed annually.
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.</td></tr>
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The school met the requirements in relation to each of the checks above.

Subject inspection

Date of inspection	16/01/2025 - 17/01/2025
Inspection activities undertaken • Review of relevant documents • Discussion with principal and key staff • Interaction with students, including focus groups	• Observation of teaching and learning during four lessons • Examination of students' work • Feedback to principal and relevant staff

School context

Temple Carrig Secondary School is a co-educational, voluntary post-primary school under the Church of Ireland patronage. At the time of the evaluation, the school had an enrolment of 947 students. The school offered the following programmes: Junior Cycle (JC), a compulsory Transition Year (TY), the Leaving Certificate Vocational Programme and the Leaving Certificate (LC).

Summary of main findings and recommendations:

Findings

- The quality of teaching, learning and assessment of Computer Science and Digital Subjects was very good overall.
- Computer Science was taught highly effectively and students were competent, confident, creative and reflective developers of computing technology.
- High expectations for learning outcomes were set by teachers, with very well structured lessons which motivated students to enjoy their learning.
- Classroom atmosphere was positive and created a productive and supportive learning environment.
- The quality of whole-school support and provision for Digital Subjects was very good, a wide range of digital subjects was offered at both junior and senior cycle.
- Planning and preparation for lessons was of a high quality and a comprehensive programme of work for all digital subjects was in place.

Recommendations

- To foster and enhance students' interest in studying digital subjects, senior management should aim to further develop teaching capacity within the school.
- There was scope to improve students' independent learning by providing more opportunities for them to problem solve individually.
- Teachers should encourage students to include comments when modelling code and consistently promote this beneficial practice.

Detailed findings and recommendations

1. Teaching, learning and assessment

- The quality of teaching, learning and assessment of Computer Science and Digital Subjects was very good overall.
- Computer Science was taught very effectively. In all observed lessons, students actively developed software solutions using computational thinking methods. They were encouraged to deconstruct problems independently, with teachers providing support and challenges when needed. Students were competent, confident, creative and reflective developers of computing technology.
- The learning environment was positive and affirming, and teacher-student rapport was very cordial and conducive to wellbeing. This atmosphere motivated students to engage diligently with the tasks set by the teacher in a purposeful and productive manner.
- Teachers provided clear instructions using subject specific language for the planned activities from the outset. They communicated the lesson's content very clearly and performed key demonstrations in language accessible to all students. This very good practice helped students of all abilities to engage with the lesson tasks and facilitated their learning intuitively step-by-step.
- Teachers set high expectations and structured lessons effectively to motivate students to enjoy their learning. All lessons featured well-planned sequences of activities, where students were actively engaged and produced high-quality work through well-paced and interesting tasks. Commendably, teachers prepared an extensive range of lesson resources which were readily accessible online for students to use for further research and study.
- A variety of teaching approaches was observed in all lessons and these included the use of questioning, pair and group work, student's practical work and the use of resources such as visualisers, worksheets, digital quizzes and games. All of the highly effective lessons were structured to ensure that students of all abilities were productively challenged throughout the lessons.
- Students used subject-specific language to showcase their knowledge and verbally reason through their solutions. While very good student programming skills were evident in class, there was scope for teachers and students to increase the frequency of comments in their code. Well-commented code serves as a form of note-making for students, enhancing code maintenance for reuse and debugging purposes.
- In most lessons, students developed ownership and responsibility for their learning. However, in a small minority of cases, teachers provided answers too early in the learning process, limiting students' time to attempt solutions independently. Emphasis should always be on developing students' own problem-solving abilities to build their analytical skills and confidence, enabling them to take personal responsibility for their work.
- In focus group discussions, students expressed their enjoyment of studying Digital Subjects, particularly the variety of coding alongside learning about technology. They stated their confidence grew through practical coding projects and applied learning tasks. Their practical competence developed incrementally over their two years of study. Students also reported that they learn best when given opportunities to collaborate with peers. They also enjoyed the autonomy afforded to them when they were encouraged to discover answers independently or through research on the internet.
- Formative assessment practices such as providing oral feedback to students on their work was of a high quality in lessons. Teachers regularly circulated the classroom ensuring that students' progression was actively monitored. During lessons, they provided continuous oral, formative feedback to students, encouraging them to break down problems leading to improved learner outcomes.
- Written feedback on the online learning platform has proven to be a significant aid for learning, study, and assessment. When students submit assignments, teachers review their work electronically and provide them with constructive and affirming comments,

offering clear guidance on how to improve. Students mentioned that they engage very positively with this method.

2. Subject provision and whole school support

- Subject provision for Computer Science and other Digital Subjects was very good. The school offered optional digital subjects for both junior and senior cycles respectively with the short courses in Coding and Computer Science. Additionally, TY students had the availed of the opportunity to take an optional computer science taster module which helped them make informed fifth-year subject choice.
- The timetable provision was in line with the syllabus and specification guidelines.
- Three teachers were assigned to teach digital subjects, which was commendable. The team were a collegial and reflective, dedicated to enhancing teaching and learning in digital subjects. However, to build teaching capacity in the school there was a need for senior management to expand specialist computer science knowledge. Senior leaders should explore the introduction of peer observation and team teaching to broaden the expertise within the subject department.
- The digital culture of the school complemented the subject well. All students used a tablet and the digital platform. These were integrated seamlessly into activities and augmented the lessons well.
- The dedicated computer science room was equipped with extensive resources for applied learning tasks. Overall, there were two well-equipped and well-maintained computer rooms available for studying digital subjects, along with a device trolley. Many interesting, engaging infographics and posters were displayed that sparked student interest and curiosity by linking learning outcomes from the specification to the real world.
- Students benefited from extra-curricular activities that promoted subject interest and provided occasions for them to showcase their learning beyond the classroom. Some of these were unique, organic school initiatives, such as the: 'Tech-Team' where TY students volunteer to solve every day technical support problems.
- Management supported the skill development of computer science teachers who have extensively engaged in relevant teacher professional learning to enhance their subject knowledge and improve teaching and learning. This included participation in Computer Science training provided by Oide, the national support service for teachers and school leaders.

3. Planning and preparation

- The overall quality of planning and preparation in the school was very good; teachers gave careful attention to detail to individual lesson planning.
- The programmes of work for LC Computer Science and the JC digital short courses were well developed. They included exact details of intended learning outcomes aligned with the specification, along with teaching approaches and appropriate timelines. These highly effective plans were living documents.
- The schools' digital learning plan demonstrated the school's strong commitment to integrating technology into teaching and learning across all subjects. It was aligned to school improvement plans and was also informed by contemporary guidelines including *The Digital Strategy for Schools to 2027*. Specific, measurable, achievable, relevant, and time-bound (SMART) targets were set in the plan, with clear responsibilities for the actions outlined.

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 Temple Carrig Secondary School about their learning in Computer Science and Digital Subjects.

Date of inspection: 16/01/2025 and 17/01/2025

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 Computer Science and Digital Subjects.

What were the main findings of the inspection?

- The quality of teaching, learning and assessment of Computer Science and Digital Subjects was very good overall.
- Classroom atmosphere was positive and this encouraged students to learn and produce good work.
- Computer Science was taught very effectively and students were confident when producing computing work.

What did the inspector recommend to make teaching and learning better in Computer Science and Digital Subjects?

- School management should increase the teachers' specialist computer science knowledge by, for example, using team teaching in lessons.
- Teachers should allow the students more time to learn by providing more opportunities for them to problem solve by themselves.
- Teachers and students should always add comments in their code. Well-commented code is a form of note-making for students.

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
Excellent	**Provision that is excellent** 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
Very good	**Provision that is very good** 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
Good	**Provision that is good** 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
Requires improvement to achieve a good standard	**Provision that requires improvement to achieve a good standard** 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
Requires significant improvement to achieve a good standard	**Provision that requires significant improvement to achieve a good standard** 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