An Roinn Oideachais agus Scileanna
Department of Education and Skills

Subject Inspection of Technology
REPORT

Saint Leo’s College
Dublin Road, Carlow
Roll number: 61140K

Date of inspection: 5 October 2011
REPORT
ON
THE QUALITY OF LEARNING AND TEACHING IN TECHNOLOGY

INFORMATION ON THE INSPECTION

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MAIN FINDINGS

• Technology education is delivered to a very high standard in Saint Leo’s College.

• Planning for the delivery of Technology in the school is excellent.

• Individual lessons observed were very well planned and executed in an innovative and enjoyable manner.

• Student activities created an active learning environment where technology was utilised to reinforce the subject matter and to maximise participation.

• Collaborative learning techniques were incorporated into lessons effectively.

• Uptake of Technology is very good and the proportion of students choosing higher level in certificate examinations is good.

MAIN RECOMMENDATIONS

• Plans should be progressed to develop the storage facilities at the subject department’s disposal, particularly in relation to completed project work for certificate examinations.
INTRODUCTION
Saint Leo’s College Carlow offers Technology as part of its Junior Certificate and optional Transition Year (TY) programmes and recently introduced the newly developed Leaving Certificate Technology subject to its senior cycle curriculum. The school has a current enrolment of 933 students.

TEACHING AND LEARNING

- Technology education is delivered to a very high standard in Saint Leo’s College.
- All lessons observed were planned to achieve specific learning objectives for students and classroom activities were structured to maximise learning and understanding. The teaching methods that characterised this approach included focused teacher demonstrations, collaborative learning activities and practical engagement in physical tasks. These strategies helped to create interesting and active learning environments where learning occurred through the incorporation of discovery techniques. Learning was further embedded through active participation in explorative tasks and through the application of skills.
- Information and communication technology (ICT) resources were incorporated into lessons innovatively and effectively. The use of audio-visual web content, subject specific software, mind-mapping applications and the internet as a research tool, enabled students to generate ideas, reinforce learning and develop individualised concepts with the assistance of appropriate remote and online applications. The use of ICT in this manner is commended.
- Specific objectives of lessons were reinforced in a structured manner through the use of student worksheets. These worksheets helped students to identify keywords and to recall previous learning. The use of project workbooks, developed by the subject department, to promote self-evaluation among students is a positive initiative. These workbooks encourage students to reflect and to identify areas for future development.
- Questioning was utilised effectively, particularly when differentiated to students’ abilities and when used to ascertain individuals’ understanding. This practice should be further developed in order to minimise the occasional chorus answering from students.
- Practical and theoretical lessons were well managed. This created an atmosphere that promoted students’ active engagement in tasks in a safe and structured manner. Group activities were clearly defined and created many opportunities for students to discuss their learning and develop their knowledge in a co-operative and collaborative manner with their peers.
- An excellent rapport has developed between the teacher and students. Mutual respect and courteous dialogue characterised the lessons observed. This created an environment where student input was not only welcomed but valued.
- Students exhibited a good level of learning in both practical and theoretical contexts. Uptake of higher level in certificate examinations is good and a good cross-section of results is achieved from the mixed-ability class groups.
SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

• The school offers Technology as part of its Junior Certificate, TY and Leaving Certificate programmes. Currently Technology does not form part of the school’s Leaving Certificate Applied (LCA) programme. The school’s commitment to Technology is commended.

• The timetabling of the subject is appropriate with a good blend of double and single period allocations. These allocations are well distributed throughout the week.

• All first-year students are given the opportunity to choose Technology as part of the school’s sampling programme. Additional initiatives such as the open evening and subject newsletter help to further inform students and parents. Transition year students also get the opportunity to sample some aspects of the subject on a modular basis before they choose their leaving certificate subjects. The availability of this level of information has contributed to the popularity of the subject in the school.

• While the facilities at the subject department’s disposal are not ideal, every effort has been made to ensure that students have access to well-maintained machinery and tools. Positive safety awareness is also apparent in the classroom through the display of standard safety signage; this awareness should be extended to include the demarcation of safety zones around specific machines and power tools. As part of ongoing subject planning, senior management should identify additional storage solutions particularly in relation to the storage of examination project work.

PLANNING AND PREPARATION

• The level of planning and preparation for the delivery of Technology in Saint Leo’s College is excellent.

• A high-quality subject plan has been developed by the subject department. This plan contains three distinctive sections: organisational details, schemes of work and analysis and review.

• Organisational planning is progressing well. An annual report outlining the subject department’s achievement and challenges is prepared for the senior management team, the board of management and is included in the school plan. This practice is commended.

• Planned schemes of work are also included in the subject plan. The schemes have been developed within the framework of the key learning outcomes for the subject. This section also includes assessment procedures and suitable resources to enhance students’ experiences of the various topics. Day-to-day curricular planning is informed by these plans and supplemented with comprehensive electronic files used to monitor students’ attendance, assessment scores and project management.

• The analysis and review section identifies short and medium-term goals for the further development of the subject in the school. This planning is structured within a SMART framework and is therefore appropriately data-driven within specified timeframes.

• The planning and preparation of individual lessons was of a high standard. The extensive array of resources and teaching aids helped to make lessons vibrant and enjoyable.

• Each student in TY is given the opportunity to sample Technology; the module plan for TY Technology includes a variety of interesting and innovative topics including stop motion animation, 2D Computer-Aided Design/Manufacture (CAD/M) and vinyl cutting.
Each topic is delivered in a two-hour session over the course of five weeks. Examples of student work are available on the school’s website and also through the school’s virtual learning environment (VLE).

- Leadership roles are also offered to TY students specifically with first-year students. These students are given the opportunity to mentor students new to Technology in a safe and structured environment and to develop their own skills through instruction.

- A variety of co-curricular and cross-curricular activities are planned within the context of Technology. These activities include room design using CAD, budgeting for life, and participation in Engineers Week activities.

The draft findings and recommendations arising out of this evaluation were discussed with the principal and the subject teacher at the conclusion of the evaluation. The board of management was given an opportunity to comment in writing on the findings and recommendations of the report; a response was not received from the board.

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