

An Roinn Oideachais agus Scileanna
Department of Education and Skills

**Subject Inspection of Technical Graphics and Design
and Communication Graphics
REPORT**

**Coláiste Phádraig
Lucan, County Dublin
Roll number: 60264A**

Date of inspection: 20 October 2014



**AN ROINN | DEPARTMENT OF
OIDEACHAIS | EDUCATION
AGUS SCILEANNA | AND SKILLS**

**REPORT
ON
THE QUALITY OF LEARNING AND TEACHING IN TECHNICAL GRAPHICS
(TG) AND DESIGN AND COMMUNICATION GRAPHICS (DCG)**

INFORMATION ON THE INSPECTION

Dates of inspection	20-21 October 2014
Inspection activities undertaken <ul style="list-style-type: none">• Review of relevant documents• Discussion with principal and teachers• Interaction with students	<ul style="list-style-type: none">• Observation of teaching and learning during six class periods• Examination of students' work• Feedback to principal and teachers

MAIN FINDINGS

- Overall, the quality of teaching and learning ranged from fair to good in the lessons observed with features of good practice found in all lessons.
- In all lessons, students were very well behaved and typically worked in an independent and diligent manner.
- Lessons typically elevated the use of procedure over conceptual understanding when solving problems.
- The quality of whole school support for the subject is very good.
- Department meetings include representation from all technology subjects, which is good practice.
- The curricular plans developed contain a brief overview of the syllabus content to be delivered by term.

MAIN RECOMMENDATIONS

- Development of teaching and learning strategies, including Assessment for learning (AfL) practices, should be undertaken to support differentiated learning and to increase the student's role in their own learning.
 - Discussions on teaching, learning and assessment practices should form part of all subject department meetings.
 - Curricular planning should be developed to identify appropriate learning outcomes with associated methodologies, resources and assessment criteria.
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INTRODUCTION

Coláiste Phádraig is a boys-only voluntary secondary school, operating under the trusteeship of the Edmund Rice Schools' Trust (ERST). It has a current enrolment of 728 students. The school offer graphics subjects as an option in the Junior Certificate and Leaving Certificate programmes. The optional Transition Year (TY) programme does not presently include a graphics module.

TEACHING AND LEARNING

- Overall, the quality of teaching and learning ranged from fair to good in the lessons observed. Features of good practice were found in all lessons. One lesson included elements of very good practice.
- Some lessons commenced with the presentation of the learning outcomes for the lesson. This good practice should be extended to all lessons, consistent with the principles of AfL.
- In all lessons, students were very well behaved and typically worked in an independent and diligent manner. Good quality student work was in evidence in all lessons. However, in one lesson, students found it difficult to achieve the intended learning outcome. Assessment of students' previous learning should be undertaken before embarking on new learning.
- In two of the lessons observed, there was a strong concentration on procedure to solve assigned problems. A greater focus on conceptual understanding should be emphasised. Opportunities for students to articulate their learning should also be promoted.
- In most lessons, teachers circulated to guide student learning. However, differentiated learning needed to be prioritised to enable students to work at a pace that supported and challenged them appropriately.
- Very good development of new subject specific key terms was undertaken in one lesson. This good literacy development should become part of all lessons. In the same lesson, students were active and enthusiastic in successfully demonstrating and describing the key terms associated with the geometry under consideration.
- In the lessons where there was more pronounced scope for development, more real and visual resources were required to aid development of the students' visualisation and special reasoning skills. It is strongly recommended that visualisation and modelling applications such as SolidWorks be used at all levels to support students learning in the subjects.
- In one lesson, students were instructed to continue with their project work. This lesson required much greater input and guidance to facilitate a deeper learning experience. There was a need to model success and to provide formative feedback on student work, consistent with the principles of AfL. It is also recommended that students be supported in establishing goals for their work and that they undertake reflection.
- Completed student work is typically stored in dedicated student folders. There was a large variation in the quality of presentation of students' work. It is recommended that a formatively assessed student portfolio component become part of the students' term assessment mark so that students' work becomes a more prominent and important learning resource to support their own learning.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- The quality of whole school support for the subject is very good. A well-equipped dedicated room is available for the teaching of the subjects Technical Graphics and Design and Communication Graphics. Almost all lessons are timetabled for the specialist room. Where possible, graphics classes should be timetabled in the graphics room to enable optimum use of subject specific resources.
- The allocation and scheduling of classes is very good. Junior cycle students are allocated four periods per week and senior cycle students are allocated five periods per week. Shared responsibility for teaching of Leaving Certificate classes is common practice. In all other cases, continuity is prioritised for classes and teachers.
- Option bands are designed in response to student preferences for first year and fifth-year students. This is a student centred approach. First year students express their preferences in advance of entry. Third year and TY students receive presentations from each subject department in advance of selecting their option subjects for fifth year. All students opting for DCG typically have studied TG.
- TG has remained a popular subject in Coláiste Phádraig. Continued effort should be placed on ensuring a good transfer to the senior cycle subject of DCG. To support this transfer, it is suggested that a design-focused module be created by the technology department to support selection of DCG and the other technology subjects in senior cycle.
- The subject department has good informal procedures to support induction of new staff members and school management is currently developing formal induction procedures to support new staff. The realisation of these procedures is encouraged.
- The school supports teachers' continuing professional development and membership of the subject teachers' professional associations. It is also noteworthy that the board of management provides a bursary for teachers who wish to engage in professional development courses. It is recommended that teachers avail of this support where possible.

PLANNING AND PREPARATION

- Co-ordination of the subject department includes the recording of minutes of meetings which are shared with school management. It is recommended that the co-ordination role be rotated periodically to provide for professional development opportunities for all subject department members.
- Meetings where all technology subjects are represented take place, which is good practice. It is recommended that the agenda for the technology department meetings include teaching and learning as an item so as to encourage development, discussion, reflection and sharing of methodologies within the department.
- Recent meetings have focused on the identification of key terms as part of the schools literacy strategy. This list should be developed and displayed in the specialist room and incorporated into the new student Keyword journal.
- The curricular plans developed contain a brief overview of the syllabus content to be delivered by term. It is strongly recommended that the plan be augmented and constructed to reflect specific learning outcomes, appropriate methodologies and resources and associated assessment modes for syllabus content in both subjects.

- The teachers' individual planning documents included records of summative assessment for homework assignments, a listing of topics covered and attendance records. Students achieve very well in state examinations in both subjects.

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