

An Roinn Oideachais agus Scileanna
Department of Education and Skills

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

**Deele College
Raphoe, Co. Donegal
Roll number: 71230R**

Date of inspection: 10 May 2012



**A N R O I N N | D E P A R T M E N T O F
O I D E A C H A I S | E D U C A T I O N
A G U S S C I L E A N N A | A N D S K I L L S**

**REPORT
ON
THE QUALITY OF LEARNING AND TEACHING IN TECHNICAL GRAPHICS AND
DESIGN AND COMMUNICATION GRAPHICS**

INFORMATION ON THE INSPECTION

Date of inspection	10 May 2012
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 deputy principal and teachers

MAIN FINDINGS

- A very good standard of teaching and learning was observed during the evaluation.
- Lessons were well planned with a variety of appropriate teaching methodologies employed.
- Good strategies are being implemented to support literacy development.
- Across the class groups, variations were found in the amount of homework being allocated and in the monitoring of students' portfolio work.
- The teachers have engaged in extensive continuing professional development.
- Subject department planning is very well progressed.

MAIN RECOMMENDATIONS

- Appropriate homework exercises should be assigned to all year groups on a regular basis.
- There should be an increase in the amount of written developmental feedback provided to students on their portfolio work.
- The criteria used for integrating marks from the continuous assessment of portfolio work with results from end-of-term examinations should be documented and communicated to the students.
- Efforts should be made to incorporate a Design and Communication Graphics (DCG) module into the Transition Year (TY) programme.

INTRODUCTION

Deele College participates in the Delivering Equality of Opportunity in Schools (DEIS) action plan. It currently caters for 564 students: 292 boys and 272 girls. Technical Graphics (TG) is offered as an optional subject in the Junior Certificate programme and the Junior Certificate School Programme (JCSP). DCG is offered as an optional subject in both the Leaving Certificate and the Leaving Certificate Vocational Programme (LCVP). The TY programme is optional in the school and does not contain a graphics module.

TEACHING AND LEARNING

- In most lessons visited, the aims of the lesson were shared with the students and written on the chalkboard. As is good practice, these were revisited towards the end of the lesson to aid recapitulation and to check learning.
- Good routines were evident with students quick to get organised. Lessons were well planned and consistent with outlined programmes of work.
- A variety of effective questioning techniques was used, including individual, global and higher-order questions. Students were allowed adequate wait-time to formulate and deliver their answers.
- Keywords were written on the chalkboard and were referred to throughout the lessons. To further build on this good practice, students should record these keywords on their sheets.
- The continuous use of subject-specific terminology provided good support for the development of literacy.
- *SolidWorks*, three-dimensional models and the planes of reference were used in some lessons to support the explanation of concepts. The presentation of concepts using multiple formats proved very effective and ensured that students engaged readily with the activities. This strategy is encouraged across the subject department.
- Chalkboard work was of a high standard. The incremental construction of solutions to drawings acts as a very strong support for students. Best practice was observed when the teachers used coloured chalk to highlight different line types.
- Freehand sketching was encouraged in a senior cycle lesson observed. The teacher carefully modelled the solution for the students using the chalkboard. This development of sketching skills is commended as it forms an important element of the DCG syllabus. It is recommended that more opportunities be taken to promote the development of these skills among all year groups.
- Teacher movement around the classroom was used to monitor progress, provide individual support and affirm students for their efforts.
- The value of homework is recognised in the subject planning folder. There are variations in practice across the subject department in relation to the allocation of homework. It is recommended that homework in the form of the completion of class work, full drawing problems, worksheets and sketching exercises be assigned to all year groups on a regular basis.
- Good levels of work were evident in students' portfolios with drawing sheets checked and initialled on regularly. To further improve students' portfolio work, it is

recommended that there be an increase in the amount of written developmental feedback provided to students. This, combined with the oral feedback currently given, should have a beneficial effect on the standard of coursework submitted.

- As is good practice, students are given credit in end-of-term reports for work carried out and assessed during the term. It is recommended that the criteria used for the allocation of these marks be documented in the subject plan and communicated to the students.
- Good teacher-student rapport generated a friendly classroom atmosphere. Interactions were purposeful and respectful with discipline maintained throughout. Students engaged enthusiastically in all classroom activities.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- TG is compulsory for all first-year students. They choose their option subjects for the junior cycle at the end of the academic year. Senior cycle students have an open choice of optional subjects. Option bands are then generated to best accommodate these choices. Good supports are in place to inform students at times of choice.
- Time provision for the subjects across most year groups is in keeping with good practice. However, the time allocation of three class periods per week to first-year students for TG is less than ideal. Lessons are well distributed throughout the week and there is a good balance between single and double lesson periods.
- It is recommended that a DCG module be incorporated into the TY programme. This should focus on *SolidWorks*, freehand sketching and include some drawing board work. Such a module would be an additional support for senior cycle students about to embark on their Leaving Certificate programme and would provide students who did not take TG in the Junior Certificate with a useful insight into the subject at Leaving Certificate level.
- Teachers have availed of subject-specific training provided by the Technology Subjects Support Service (t4). They have also attended evening courses provided by the National Centre for Technology in Education (NCTE). This in-career development of teachers is commended.
- The subject department has two rooms available to it for the teaching and learning of the subjects. One of these is of a traditional layout and contains limited displays. It is recommended that the subject teachers work towards developing this room into an attractive and visually stimulating learning environment through the display of posters, t4 worksheets, student work and DCG assignments.

PLANNING AND PREPARATION

- Formal subject planning meetings are held regularly with minutes of recent meetings retained in the planning folder. A subject co-ordinator should now be appointed to facilitate the sharing of resources, convene meetings and maintain the subject plan. This role should be rotated amongst the teaching team.
- The subject planning folder is very well developed and shows a strong engagement with the planning process.

- The schemes of work are laid out clearly and are well structured. To build on this good work, it is recommended that more detail be provided on student learning outcomes, teaching resources and proposed methods of assessment.
- It is recommended that a section of the plan be devoted to the long-term development of the subjects in the school. Priorities identified should include, amongst others, the introduction of a TY module and the development of the classroom learning environment.
- Students' outcomes in the certificate examinations are analysed and compared to the national norms. As is good practice, the trends identified inform long-term planning for the subjects.

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