

An Roinn Oideachais agus Scileanna

Department of Education and Skills

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

**Ashbourne Community School,
Ashbourne, Co. Meath
Roll number: 91495T**

Date of inspection: 12 September 2011



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

INFORMATION ON THE INSPECTION

Date of inspection	12 September 2011
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 seven class periods• Examination of students' work• Feedback to principal and teachers

MAIN FINDINGS

- Lessons were well structured and featured good preparation by the teachers.
- In the lessons observed, teaching and learning was good.
- Across the year groups, there were variations found in the amount of homework being allocated and in the monitoring of students' portfolio work.
- The subject department is well supported within the school through the provision of time, resources and equipment.
- Subject planning is well progressed. Planning folders are properly organised and contain detailed schemes of work for each year group.

MAIN RECOMMENDATIONS

- Homework in the form of full drawing problems, worksheets and sketching exercises should be given on a more regular basis to all year groups.
 - Strategies should be put in place to further promote and develop the subjects in the school.
 - Clear and transparent procedures need to be established around the integration of continuous assessment marks with end-of-term examinations.
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INTRODUCTION

Ashbourne Community School currently caters for 1038 students: 560 boys and 478 girls. Technical Graphics (TG) is offered as an optional subject in the Junior Certificate (JC) programme and Design and Communication Graphics (DCG) is offered as an optional subject in both the Leaving Certificate (LC) programme and the Leaving Certificate Vocational Programme (LCVP). The transition year (TY) programme is optional in the school and contains an optional graphics module.

TEACHING AND LEARNING

- All of the lessons observed had clear aims and learning outcomes and these were communicated orally to students at the outset. Teachers are encouraged to write these aims on the chalkboard or display them using the data projector. The aims can be used at the end of the lesson to aid recap and assess progress.
- Teachers moved freely around the classroom to monitor the engagement of students in lesson activities and to provide individual support and direction. A good pupil-teacher rapport created a relaxed and friendly atmosphere which was conducive to learning.
- Good routines were evident with students quick to get organised for their lessons and to tidy away at the end of class.
- The pace of the lessons observed was mostly good. In one of the lessons, the planned work was finished early. It is important that in such cases, any remaining time is used to review the lesson, to explain homework or to discuss the content of the next lesson.
- Questioning was used effectively to encourage students to engage with the lesson content. In most cases, the answers provided indicated that student learning was taking place in abundance.
- One of the lessons observed featured extensive teacher explanations. This resulted in very little time for student involvement. To create an active learning experience for students, all efforts should be made to make the subjects as participative as possible through the use of a wide variety of teaching methodologies.
- Information and communication technology (ICT) was used in one lesson observed. The subject teachers should make wider use of this resource.
- The chalkboard was used effectively to model the development of solutions to geometric problems. One lesson featured students coming up to the chalkboard to participate in the solving of a problem. This approach had the effect of capturing students' attention and enthusiasm and is commended.
- The frequency of homework being assigned to students varied considerably across the lessons observed. It is recommended that every effort be made to ensure that homework is allocated on a regular basis to all year groups and to students studying the subject at all levels.
- There was some evidence of freehand sketching and rendering techniques being developed. The further promotion of these skills among students is encouraged through the sketching of sheet layouts, possible solutions to exercises and three-dimensional or

orthographic projections of objects. Such sketching practice should be incorporated into the everyday teaching of the subject.

- There was evidence of constructive feedback on drawings in portfolios for some year groups. Best practice provided feedback to students in the form of written developmental comments in line with assessment for learning (AfL) principles.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- First-year students choose their optional subjects prior to entering the school. Students are supported in making these choices through the provision of an open day held during the previous October. As a further support, parents are invited to attend an information evening on subject choice during the spring.
- Students moving to senior cycle choose their optional subjects from a list of available subjects. Option bands are then formulated to best match students' preferences. This good practice prioritises the needs of students.
- Lessons are well distributed across the week. Time allocation to the subjects is sufficient for the completion of the respective syllabuses.
- The in-career development of teachers is actively supported by school management. Teachers have attended all the subject-specific training provided by the Technology Subjects Support Service (t4).
- The room available for the teaching and learning of the subject is well equipped. Good displays of student work, including the display of a full DCG assignment, create a stimulating learning environment. Other work is displayed outside the room helping to raise the profile of the subjects amongst the general school population. It is important to update and vary these displays to maintain student interest.
- As is good practice, a proportion of marks awarded at Christmas and summer is based on students' coursework. The mechanics of this process are unclear. It is recommended that the subject department develop clear guidelines to ensure a uniform approach to the integration of marks from portfolio work and assignments with those from end-of-term examinations.

PLANNING AND PREPARATION

- A subject coordinator is in place and this role is rotated amongst the members of the subject team. Following best practice the duties attached to the role are clearly defined.
- Formal planning meetings are held once per term but minutes of these meetings have not been maintained in recent years. It is recommended that records of these meetings be kept and forwarded to management for consideration.
- Separate planning folders have been developed for the two subjects. These are well organised. An interesting module focusing on Computer Aided Design has also been developed for the TY programme.
- The schemes of work within the planning folders are well laid out and clear. It is recommended that a more comprehensive cataloguing of resources within the schemes of work would strengthen collaboration amongst subject teachers. Resources listed should

be linked to topics and give details on interesting websites, digital presentations, *SolidWorks* models as well as solutions prepared by teachers.

- To further improve on subject planning, it is recommended that the subject department identify priorities for the future development of the subjects within the school. Priorities could include: increasing the numbers of students opting to study the subjects, addressing the marked drop off in the number of students participating in the subject after completing the JC and developing strategies to increase the participation of female students in the subject at senior cycle.
 - Students' outcomes in the certificate examinations are analysed and compared to national norms. This analysis provides an insight into the standing of the subjects and, commendably, is used to inform future planning.
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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 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.

Appendix

SCHOOL RESPONSE TO THE REPORT

Submitted by the Board of Management

Area 1: Observations on the content of the inspection report

The Board of Management welcomes this report, is mindful that the report occurred early in the school year and is satisfied that although not evident on the day, ICT is used extensively at other times throughout topics. The Subject department has a large database of files, power points, handouts and 3D Models which are used for all topics, but not always necessarily at the beginning of the year. This is supported in the planning documentation and in the schemes of work. As acknowledged in the report, all teachers have attended the T4 training and this informs all planning and practices in the subject area.

The Board is happy to see the many positive findings and strengths identified in the report and accepts it in the context of students' outcomes in state examinations which are well above National Averages in the subject.

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

The Board of Management will continue to support and promote the teaching and learning of Technical Graphics/Design, Graphics Communication in the school and will assist the subject department in the implementation of the main recommendations.