An Roinn Oideachais agus Scileanna

Department of Education and Skills

Subject Inspection of Metalwork and Engineering
REPORT

Blessington Community College
Blessington, County Wicklow
Roll number: 70760S

Date of inspection: 29 April 2013

AN ROINN OIDEACHAIS AGUS SCILEANNA | DEPARTMENT OF EDUCATION AND SKILLS

REPORT
ON
THE QUALITY OF LEARNING AND TEACHING IN METALWORK AND ENGINEERING

INFORMATION ON THE INSPECTION

Date of inspection	29 April 2013
Inspection activities undertaken • Review of relevant documents • Discussion with principal and teacher • Interaction with students	• Observation of teaching and learning during six class periods • Examination of students' work • Feedback to principal and teacher

MAIN FINDINGS

- The teaching and learning was of a good standard and areas for improvement in assessment and mixed ability teaching strategies have been identified.
- The quality of the questioning strategies employed to engage and include students and to assess their learning was very good.
- Teacher-student interactions were professional, supportive and facilitated the development of a positive learning environment.
- Metalwork and Engineering receive good levels of support from school management.
- Good progress has been made in subject planning, with some scope for development identified in the areas of strategic planning and curricular planning.

MAIN RECOMMENDATIONS

- Students should be given more detailed differentiated guidance that clearly identifies the required levels of learning expected of them on an ongoing basis.
- The subject department should prioritise the development and inclusion of formative assessment practices in all lessons where practicable.
- Subject planning should now focus on specific actions to address agreed priority areas, such as students' literacy and numeracy skills, identified in the subject department plan.

INTRODUCTION

Blessington Community College offers Metalwork and Engineering in all curricular programmes at both junior and senior cycle. All students who opt for the school's Transition Year (TY) programme take part in an Engineering module. The school is co-educational and has a current enrolment of 307 students.

TEACHING AND LEARNING

- Good quality teaching and learning was evident in the three lessons observed.
- The quality of the questioning strategies employed to engage and include students, as well as to assess their learning, was very good. Effective methods used throughout the lessons observed included probing, redirection, hinting and reframing.
- Appropriate demonstration media were used which focused students' attention and supported the development of key points. The use of the data projector was restricted when there was a high intensity of light in the room. On occasion, this can prevent the effective integration of information and communication technology (ICT) resources into lessons.
- In two of the three lessons observed, there was an appropriate balance between teacher and student activity. In a third-year lesson, students' work was primarily independent with some guidance from the teacher. The structure and delivery of this lesson could have been improved by providing more detailed guidance to students from the outset and by providing students with assessable learning outcomes and incorporating additional mixed ability teaching strategies.
- Students' knowledge was collated in an effective manner, prior to the development of the lesson topic, on a number of occasions. This was achieved using the board to record significant relevant points before developing the lesson topic in a more comprehensive manner. The increased use of graphic organisers should be considered in order to equip students with the skills required to recall and structure key points of information.
- Overall, students were engaged in their learning and this was facilitated in a number of ways. Group-work activities increased student interaction and model-making activities helped students to plan, create and evaluate their work. Scope for improvement was identified in relation to the inclusion of some students who had chosen the ordinary level course. Continued efforts to include these students in a meaningful manner should be prioritised.
- Designated special needs assistance for students was effectively integrated into lessons. This was beneficial to the overall inclusion of students and provided a valuable support at the level of the individual student.
- The quality of teacher-student interactions was very good. A relaxed and supportive rapport has developed over time and this facilitated the development of the positive behaviour and relationships observed.
- Evidence of students' learning was good. Copies were generally well maintained and in some cases, particularly first-year, students' work was of a high standard. Limited formative assessment was evident from students' written work. Strategies should be developed to address this issue in order to maximise student learning and to further develop their awareness and skills in identifying their own areas for improvement.

- Most students choose the higher level Metalwork and Engineering courses. This is a very positive outcome. Students achieve a good range of grades within their respective level which demonstrates that achievement level appropriate to the abilities of students studying the subjects are being attained.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- Metalwork and Engineering are offered to students entering all of the school's curricular programmes. Currently, there are three class groups at junior cycle, two groups in the school's optional TY programme and one fifth year group studying Metalwork and Engineering. Due to a very small number of students opting for the subject in September 2011, there is no sixth-year class studying Engineering at present.
- The time allocated to the subjects is appropriate at both junior and senior cycle. The duration of these classes are double periods at junior cycle and this provides appropriate time for practical skill development.
- To support first-year students, the school operates a short subject-sampling period. This four week programme helps students to gain a better understanding of the optional subjects prior to making their final choice for the Junior Certificate programme.
- Optional subject bands at both junior and senior cycle are devised based upon student preferences and vary from year to year. During TY, a half-year module has been developed and this enables all students who choose TY to study aspects of engineering and technology. This module also informs them about possible academic and career choices.
- Overall support for the subjects from senior management is good. While space is limited, the practical classroom is well equipped and provides a positive learning environment for the teaching and learning of the subjects. There is a good level of safety awareness in the room with appropriate standard signage and hazard notifications on display.

PLANNING AND PREPARATION

- Good progress has been made in the area of subject planning. Very good schemes of work have been developed for all year groups and these schemes clearly identify the learning outcomes, methodologies and resources required to effectively teach the various curricular components in line with the syllabus requirements.
- To further improve these curricular plans, additional emphasis should now be placed upon identifying and implementing appropriate forms of assessment in conjunction with each curricular component and detailing agreed strategies to be used within the school's overall literacy and numeracy initiatives.
- The subject plan for Metalwork and Engineering is being developed and some good work has been completed in the areas of strategic planning including the identification of agreed priority areas. These plans should now be developed to include required actions, timeframes and specified success criteria for each priority area.
- Planning and preparation for the three lessons observed was good.

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 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.

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