REPORT ON THE QUALITY OF LEARNING AND TEACHING IN MATHEMATICS

INFORMATION ON THE INSPECTION

<table>
<thead>
<tr>
<th>Date(s) of inspection</th>
<th>21 &amp; 22 March 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspection activities undertaken</td>
<td>Observation of teaching and learning during eleven class periods</td>
</tr>
<tr>
<td>• Review of relevant documents</td>
<td>• Examination of students’ work</td>
</tr>
<tr>
<td>• Discussion with principal and teachers</td>
<td>• Interaction with students</td>
</tr>
<tr>
<td>• Observation of teaching and learning during eleven class periods</td>
<td></td>
</tr>
<tr>
<td>• Examination of students’ work</td>
<td></td>
</tr>
<tr>
<td>• Feedback to principal and teachers</td>
<td></td>
</tr>
</tbody>
</table>

MAIN FINDINGS

- Student participation, where facilitated by the integration of resources and the use of active teaching, was very good.
- Ongoing assessment of student learning is well managed and proactive measures have been taken in senior cycle to address evident shortcomings in student performance in Mathematics.
- The quality of teaching and learning was, in the vast majority of cases, very good. There were, however, a small number of cases where the teaching was poor.
- The time allocated to Mathematics, particularly in transition year (TY) is very good. The scheduling of mathematics classes, however, is in need of review.
- Subject department planning in Mathematics is well advanced and is supported by very good planning structures.

MAIN RECOMMENDATIONS

- The very good practice of resource integration, teacher lesson planning and the use of active teaching, evident in the vast majority of cases should be uniformly adopted across the mathematics department.
- The first year mathematics programme should be delivered in a mixed ability setting and the content of the programme should reflect the outcomes of the analysis of the entrance assessment.
- The mathematics programme in TY should be reviewed. The programme should be delivered in a mixed-ability setting and should be comprised of a core and options thereby developing the students’ mathematical skills and their appreciation of mathematics.
- The interventions introduced to address student performance in senior cycle should be replicated in second and third year.
INTRODUCTION

Old Bawn Community School is a co-educational school catering for the educational and other needs of 830 students drawn from a variety of social and cultural backgrounds. It provides a broad and balanced curriculum, which includes the Leaving Certificate Applied programme and TY. The board of management of the school 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.

TEACHING AND LEARNING

• The quality of teaching, in the vast majority of lessons was very good and featured good lesson structure, unambiguous learning outcomes and the integration of resources prepared in advance of the lessons.

• In a small number of cases, the quality of teaching was poor. In these lessons the objectives were unclear, the lessons lacked any coherent structure and the language and teaching methods used were not appropriate to the needs and abilities of the students.

• Student engagement and participation were, in almost all cases very good. The use of dynamic software, differentiated worksheets and active teaching methods ensured that the lessons were engaging and appropriately challenging.

• Ongoing assessment of student learning formed an integral part of lesson delivery. This was primarily achieved through very good teacher questioning and observation of students as they worked on assigned tasks. Very good practice in relation to assigning and correcting homework was also evident.

• The quality of student learning ranged from very good to poor. Management and the members of the mathematics department have introduced team teaching and targeted withdrawal to address issues with student performance in Mathematics in senior cycle. Student performance in the Leaving Certificate examination in 2010 indicate that this approach is working well and it is recommended that a similar approached be adopted in second and third year.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

• The amount of time allocated to Mathematics is very good. The provision of five classes of Mathematics per week in TY and the scheduling of these classes which includes one double period each week is most praiseworthy. This model ideally suits the requirements of TY as it facilitates project work and collaborative learning.

• The scheduling of mathematics classes generally is in need of review. The review should ensure that existing timetabling anomalies which result in students having mathematics classes on just four days per week should be avoided in future. Furthermore, in order to support the implementation of Project Maths, it would be preferable if the existing provision in fifth and sixth year were reconfigured to include one double period.

• The qualifications profile of the mathematics department is very good and capacity building within the department means that four of its members are in a position to teach higher-level Mathematics in senior cycle. However, the department which currently
comprises fourteen teachers should be reduced in size in order to ensure that all of the
members of the department have Mathematics as their chief focus and to guarantee
greater cohesion in department planning and curriculum delivery.

- Formal assessment practices in Mathematics are very well managed. The mathematical
capabilities of students entering first year are determined using a mathematics
competency test the results of which determine the composition of the mathematics
classes in first year. In order that maximum benefit accrues form this process, it is
recommended that the content and delivery of the first-year programme should address
any weaknesses and exploit the strengths evident from the analysis of the entrance
assessment

- Mathematics classes are streamed in first year and are set thereafter. It is recommended
that the first-year mathematics programme mentioned above be delivered in a mixed
ability setting and that student performance throughout first year inform the composition
of the classes when setting takes place at the end of the year.

PLANNING AND PREPARATION

- Subject-department planning in Mathematics is well advanced. Very good planning
structures are in place and a comprehensive subject department plan for Mathematics is
also in place.

- The schemes of work contained in the plan are in need of further development. The
schemes should be written in terms of learning outcomes and should capture the existing
good practice in relation to resource integration in teaching and learning.

- The TY mathematics plan and the manner in which the mathematics classes are arranged
are in need of review. The plan that emerges for the review should include a core of
material to develop the students’ mathematical skills and a number of options to enhance
their understanding and appreciation of Mathematics. Provision for collaborative project
work should also be made. The programme should be delivered in a mixed-ability setting
rather than in streamed classes as is currently the case.

- Individual teacher lesson planning was, in almost all cases, very good.

- Planning in relation to the ongoing assessment of students is very good. Continuous
assessment and the provision of common papers within levels are key features of the
ongoing formal assessment. The papers set for the formal assessments are of a very good
standard and model the format and approach of the certificate examinations.

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

Published, October 2011
Appendix

School Response to the Report

Submitted by the Board of Management
Area 1  Observations on the content of the inspection report

- The Board wish to note their satisfaction with the inspection report; they note the content and concerns expressed in the report.
- In light of recent media publications, the Board note the qualifications profile of the staff teaching Maths is very good.
- The Board also note the performance of students in this school in the PISA Study 2009 is slightly above the Irish average.

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 note the comment in relation to mixed ability and from September 2012, mixed ability groupings will operate from first year on.
- The Board note the comment in relation to a small number of cases where teaching was poor and the Board are taking the necessary steps to attempt to rectify this situation.