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Mrs M Bridson Headteacher Impact KS4 PRU Daleacre Campus Daleacre Drive Bootle L30 2QQ

Dear Mrs Bridson

### Ofsted 2010-11 subject survey inspection programme: mathematics

Thank you for your hospitality and cooperation, and that of the staff and students, during my visit on 28 March 2011 to look at work in mathematics.

The visit provided valuable information which will contribute to our national evaluation and reporting. Published reports are likely to list the names of the contributing institutions but individual institutions will not be identified in the main text without their consent.

The evidence used to inform the judgements included: interviews with staff and students; scrutiny of documentation; analysis of students' work; and observation of two lessons and a special educational needs support session.

The overall effectiveness of mathematics is satisfactory.

#### **Achievement in mathematics**

Achievement in mathematics is satisfactory.

- Students' attainment on entry to the referral unit varies widely. It is low overall but has risen significantly in the last couple of years. In 2010, 68% gained a GCSE A\* to G grade and a minority reached the higher A\* to C grades. Some students gained alternative qualifications in mathematics.
- Around half of the current Year 11 students joined the unit having made inadequate progress during Key Stage 3, and an increasing number are joining partway through the key stage, sometimes during Year 11. Many also arrive with a track record of poor attendance. The unit is successful in settling students into its routines and varied curricular provision, providing tailored support for individuals where necessary. Many show marked improvement in their behaviour, attitudes to learning, attendance and

- progress. Attendance has risen by eight percentage points this year but absence remains a barrier to better achievement for a significant minority.
- The good progress many students make in their personal development means that the scene is set for learning. Behaviour was good in the lessons observed. Students are attentive and cooperative but sometimes lack confidence. Relationships between adults and students are positive. All of this provides scope to raise expectations and accelerate progress.

## Quality of teaching in mathematics

The quality of teaching in mathematics is satisfactory.

- The quality of teaching is satisfactory and improving. One lesson involved students solving challenging, interesting problems set in real-life contexts. Two teachers are benefiting from a mathematics course at Edge Hill University, and are using new ideas and activities in their teaching.
- The quality of teachers' questioning varies. Not all teachers check what students know already. Other areas for development in the teaching include sequencing learning in short, focused chunks, and being more ambitious about what individual students might achieve. Teachers do not routinely use data to aid lesson planning. Occasionally, staff use mathematical language and notation imprecisely.
- Teachers mark students' work regularly. While assessment information is displayed in one classroom, better links could be made between this and feedback to students on their work. Self-assessment is developing in some classes. New tests to assess students' attainment on arrival at the unit are enabling gaps in their knowledge to be identified but this is not feeding into teaching or programmes of catch-up and/or extension.

## **Quality of the curriculum in mathematics**

The quality of the curriculum in mathematics is good.

- All students have the opportunity to study GCSE mathematics and some also take qualifications in functional mathematics. The unit is sensibly planning to increase curriculum time for mathematics from September 2011 to aid a stronger focus on real-life practical mathematics.
- The subject leader provides suitable resources for her colleagues, coupled with informal support and discussion. Staff share ideas, such as those explored in the course undertaken by two teachers. Opportunities for students to use computers within mathematics lessons are inconsistent.
- Students' learning in lessons is complemented by their experiences of mathematics in the various vocational pathways they follow for three days each week. The unit's plan to work with a local further education college to map out the functional skills thus covered is sensible.
- Support staff aid students' learning in lessons and through approaches adapted to individual needs; for instance, some students receive one-to-one tuition after school while others are supported through off-site visits.

#### Effectiveness of leadership and management in mathematics

Leadership and management in mathematics are good.

- The unit has a long-term track record of building students' confidence and settling them into learning through strong pastoral care. Increasing ambition for students' academic outcomes is sensibly informed by potential qualification pathways and post-16 destinations.
- Management systems are well established. Self-evaluation is accurate and underpins good capacity for further improvement. The annual subject review identifies appropriate key points for action. These feed into the detailed development plan which includes arrangements for monitoring and success criteria, and incorporates teachers' professional development.
- The close-knit ways in which the dedicated staff work provide many informal opportunities for working alongside and observing lessons. You and the deputy headteacher also conduct formal lesson observations but these do not always place enough emphasis on mathematical details.
- The use of data as a management tool is developing. The unit has struggled previously to obtain full sets of data and estimates for students' performance. Summaries of examination results and other assessment data are not interrogated to provide insight into strengths and weaknesses in the provision. At present, assessment systems do not enable teachers to keep a close track of students' attainment and progress in mathematics.

# Areas for improvement, which we discussed, include:

- raising students' attainment and progress by capitalising on their positive attitudes and behaviour
- improving teaching by:
  - strengthening the quality of questioning to identify students' starting points, check understanding, and provide challenge
  - ensuring lesson planning sequences learning effectively
  - sharing good practice in the use of practical activities and problem-solving in real-life contexts
- developing the use of assessment to track students' attainment and progress, and analysing monitoring information to pinpoint strengths and areas for development in the teaching or the curriculum.

I hope that these observations are useful as you continue to develop mathematics in the school.

As explained previously, a copy of this letter will be published on the Ofsted website. It may be used to inform decisions about any future inspection. A copy of this letter is also being sent to your local authority.

Yours sincerely

Jane Jones

Her Majesty's Inspector