

Ms Isobel Nisbet  
Chief Executive, Ofqual  
Spring Place  
Coventry Business Park  
Herald Avenue  
Coventry  
CV5 6UB

23 February 2010

Dear Ms Nisbet,

**GCSE Science criteria: mathematics skills requirements**

SCORE welcomes the inclusion of the mathematics skills requirements document alongside the GCSE science criteria. However, the partners in SCORE are concerned about the process for arriving at the mathematical skills requirements. In particular, they are concerned that this process will have limited the effectiveness of the final document.

Unfortunately, the QCDA did not take the opportunity to consult with SCORE over the summer on a draft of this document. This would have enabled the science community to consider in depth the mathematical requirements of the proposed criteria. In addition, unlike the criteria, there has been no open consultation on the mathematical skills requirements document.

The recent meeting held by Ofqual has also raised concerns. SCORE was asked to recommend members of the SCORE partnership to undertake a review of the draft documentation, which was a potentially useful step forward. The participants understood that it the document would be discussed at a task-based meeting. The aim of this meeting, as they understood it, was to consider whether the mathematics skills presented matched the criteria. It was also understood that the meeting would explore whether to differentiate the mathematics skills required in each of the six specifications (in common with the A-level sciences criteria), an approach which SCORE would consider supporting. However, the meeting appears to have considered the draft document line by line, and not drawn on the tasks carried out by the participants.

As a result of the discussions that took place in this meeting, we are particularly concerned that the mathematics skills presented in the document are simply based on those that have been recently assessed, and therefore the document may not raise the standards of future assessments. SCORE is also concerned that that the preamble paragraph may enable awarding organisations to disregard some or all of the skills required, and that the specifications from different awarding organisations will not incorporate mathematics and its assessment in a comparable way.

In addition, the mathematical skills requirements document does not make it clear that GCSE science examinations must include using mathematics in context. We would also have preferred to see an indication made to awarding organisations regarding how much of their assessments should include the assessment of mathematical skills in context.

A mathematical skills requirements document is a positive addition to the GCSE science criteria and has the potential to identify the mathematical skills that specifications should include in order to allow students to access the science outlined in the criteria. We hope that you will be able to address our concerns regarding the process of developing and approving criteria and related documentation. We would welcome the opportunity to discuss with Ofqual potential models for engaging the science community in similar work in the future. Please could you contact SCORE's Manager, Rosalind Mist, at [rosalind.mist@score-education.org](mailto:rosalind.mist@score-education.org) or on 020 7451 2205 to arrange a suitable meeting date.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Alan Wilson', with a horizontal line underneath it.

Professor Sir Alan Wilson, FRS

**Chair of SCORE**

cc Andrew Hall (QCDA), Julie Bramman (DCSF), Rt Hon Ed Balls MP Secretary of State for Children