

Education and Innovation Committee

From: markgrace@ [REDACTED]
Sent: Wednesday, 8 May 2013 12:57 PM
To: Education and Innovation Committee
Subject: Parliamentary Inquiry into Assessment Methods for Senior Maths, Chemistry & Physics

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Dear Committee Members,

I believe that the Queensland Studies Authority (QSA) methods for assessing Senior Mathematics (Maths A, B & C), Chemistry and Physics are invalid and unreliable.

The QSA's assessment methods are invalid for three reasons

- a. Assignments fail to assess the actual student's work by mandating assignments, which can be done with help from tutors and parents.
- b. The QSA's criteria paragraphs measure subjective and irrelevant things such as whether mathematics questions are "routine or non-routine".
- c. The QSA's replacement with numerical marking with A-E letter grades for each question or assignment task is unreliable. Letters cannot be 'added up' in any reliable way to arrive at a final overall letter grade for a subject.

The QSA system is unfair and time-consuming for teachers and parents.

Yet Queensland is generally behind the other States in maths and science achievement.

Please adopt the following recommendations (except 5.) by January 2014 –

1. Numerical marks should be used for all assessment out of 100% and our marks and percentages shown on assessment tasks and School Reports.
2. Assignments in maths should be eliminated and Physics and Chemistry assignments should be –
 - a. optional assessment for schools teaching these subjects;
 - b. capped at 600 words;
 - c. preferably supervised in class;

- d. counted towards a maximum of 10% of senior assessment for the subject.
3. Syllabuses should be re-written to limit calculator use and irrelevant assessment criteria, so students are properly assessed on the basics in these subjects.
4. Syllabuses should be re-written to place emphasis on repetition and rote learning of times tables and other basic processes from Prep-Year 10. This would increase student confidence, ability and participation in these subjects in Years 11 and 12.
5. External exams must be introduced in senior maths and science subjects, to be sat in the final semester of Year 12, commencing in 2015.

Yours sincerely,

Mark Grace

