To: The Education and Innovation Committee eic@parliament.qld.gov.au

From:

Dear Committee Members,

I have been teaching Biology for 15 years. Firstly it is very frustrating that Biology is not given the same consideration as Chemistry and Physics as it too, is a legitimate and essential Science subject. I feel frustrated and annoyed with the constant lack of acknowledgement around the difficulties that schools, teachers and students face as a result of the QSA and their approach to assessment.

I am concerned that QSA will be unhappy that I have made a submission to the Education and Innovation Committee and deal with my panel submissions and the like prejudicially as a result. I therefore request that all names be removed from my submission. To make this task easier, I have written all names in red.

My submission is set out under four headings.

Ensuring assessment processes are supported by teachers.

- The 2012 QIEU survey shows that this is not so. Roughly 50% of maths/science teachers have great reservations about QSA's assessment process
- Assessment is inconsistent from school to school
- QSA's guidelines change regularly and advice is contradictory
- QSA bullies teachers who dare to voice different opinions

Student participation levels.

- Workloads have increased dramatically
- Students are not coping and are having breakdowns
- Students choose subjects other than science, because they are easier

The ability of assessment to support valid and reliable judgments of student outcomes.

- Standards vary from school to school, district to district and year to year
- Grading with letters means that students with different marks get the same grade
- Large amounts of the course are assessed by assignments and these can be copied
- Time taken in assignments, especially drafting processes, takes away from teaching time
- The assessment is inequitable. Students who can afford tutors, those with better writing skills and with family working in maths and science do better.
- New teachers at schools which are under resourced cannot cope
- Some assessment tasks do not allow good students to get the grade they deserve
- Long essays have no place in Maths. Many students who excel at maths are not great at writing. This discriminates against them
- The use of long writing tasks discriminates against students from non English speaking backgrounds and boys
- The criteria paragraphs which the QSA call standards, are highly subjective

Issues with EEI tasks in Biology

- EEI tasks are extremely time consuming and impractical to run in a school situtation
- The nature of schools is such that there are many interruptions each and every term

• These interruptions make scheduling adequate and continuous time in which to perform EEI tasks almost impossible and inevitably some students are disadvantaged when they miss lessons due to other subject commitments

It is important to note that when the current Biology syllabus was implemented in Qld schools it was done so without a trial pilot, unlike Chemistry and Physics. The attitude of the QSA was one of indifference possibly due to the issues they faced with the long running issues that the Physics trial presented and the numerous rewrites it required. Consultation for Biology was non- existent.

It is absolutely imperative that if these types of assessments are removed from the Chemistry and Physics subjects, they must also be removed from Biology as they are a source of as much angst for teachers and students of Biology as they are for those of Chemistry and Physics. We must not be treated as second class as we all too often are!

I support state-wide exams set by teams of experienced teachers. The assessment could be 50% external exam, 50% internal. EEI task for all science subjects must be removed.

Those who make decisions on curriculum in our schools should spend at least 6 months in the classroom every 4 years. Educational theorists without substantial classroom experience and subject specific experience should not be employed in decision making positions.

Kind regards

(A signed copy is being sent by mail)

APPENDIX : Some research details

The **Scottish Qualifications Authority's investigation of the QSA assessment processes** states on page 12 that "It might be thought that this degree of externality would be sufficient to allow young Queenslanders to demonstrate their fitness to enter, for example, HE. Anecdotal evidence, however, tends to indicate that there might be a perception in Australia in general that those emerging from the Queensland internal assessment system will always be seen as less well qualified than those who have been through an external assessment system in other states."

On page 22

"It would be essential in Scotland to ensure that any such external exit assessment was immediately credible with its end-users, without the need for any further assessment such as the university entrance examination required in Finland. Candidates having undergone an internally-assessed system must not be disadvantaged by a perception that it is less rigorous than other systems that are externally assessed."

Not exactly a glowing recommendation! Scotland decided not to follow the QSA model.

http://www.sqa.org.uk/files ccc/PNP ResearchReport1 TheAssessmentSystemsFinlandQu eensland.pdf

Another more recent assessment is by **Prof Gordon Stanley of Oxford**.

http://oucea.education.ox.ac.uk/wordpress/wp-content/uploads/2011/01/2009 03-Review of teacher assessment-QCA.pdf

Read **'Experimentation on the Science Syllabus puts feelings before facts**' (quote below). Recall that the QSA refers to its system of assessment as "World's best practice."

"The view of science as outlined by the Queensland Studies Authority was utterly rejected by the Australian Council of Deans of Science, representing the heads of science faculties in the nation's universities. The council's executive director, John Rice from Sydney University, said it was a misleading view of science and misunderstood "the unique way in which science goes about understanding things".

http://mediaspinners.blogspot.com.au/2012/07/oz-science-ruined.html

For teachers of Mathematics

A forum for comments on Qld high school maths <u>http://www.platoqld.com/?page_id=23</u>

US Mathematician Bill Quirk contrasts mathematics with 'education mathematics' (various articles) <u>http://www.wgquirk.com/BQMath.html</u>

Biology, Chemistry and Physics: A compilation of some Queensland teachers' comments

https://dl.dropboxusercontent.com/u/86340463/letterswithOUTnamesOK.docx