### **Dear Dr Matters**

I am writing in responses to your focus questions. Thank you for considering my submission. I am a physics teacher in an independent school on the Sunshine Coast. I have been teaching physics and maths in Queensland for more than 15 years and have been a member the physics panel for a number of years. The views expressed in this submission are my personal views.

## Focus Question 2. External assessment.

As you are aware, the Education and Innovation Committee (EIC) of seven members of our Queensland Parliament conducted a thorough inquiry into the assessment methods in senior maths, physics and chemistry over an eight month period. The inquiry received more than 280 public submissions and recommended that external exams in these subjects count for 50% of a student's overall achievement. Its recommendation was based on more than 80% of the respondents being in favour of external exams. I am pleased that ACER will be responding positively to this recommendation. I suggest that external assessments in maths, physics and chemistry contribute to 50% (not "up to 50%") of a student's result and these assessments cover the syllabus content of the entire two senior years.

I have four concerns. My first concern is that ACER may be recommending on-line based exams for external exams. The kind of external exam that EIC and the 80% submitters have in mind is the traditional, time-tested, pen-and-paper exam that is used in every other state and around the world.

My second concern is that ACER may be recommending that QCAA set and mark the external exams. Most people would like to see a panel of subject experts, and not a group of bureaucrats, set and mark the papers.

My third concern relates to how the subject results would be reported. In your paper titled 'Preliminary Thinking and Options", dated 4 February 2014, you are proposing that school assessment and external assessment be combined numerically to produce the subject result. I am concerned that your proposal would deny the universities, employers and other interested parties the vital information of how the student performed in each of the two modes of assessments.

My fourth concern relates to the discrepancy analysis in the same paper. You are saying that QSA will carry out the discrepancy analysis. It is important that discrepancy analysis be carried out as recommended by the EIC. The external exam should be used to scale the school based assessment.

There are many advantages for including an external assessment. The EIC report of October 2013 lists many of these on pages 75-82. Hundreds of submissions made to the EIC inquiry have also indicated why they prefer an external exam. I am surprised that in spite of this, your focus question, yet again, asks people for the advantages of including external assessments. Here are a few that I can think of:

- 1. It is an effective, proven, time-tested way of assessing student ability. All other states use them and so do many educational jurisdictions around the world whose educational standards and achievements are higher than ours.
- 2. It delivers consistency in assessment practices across the state, which we currently do not have.
- 3. It gives parents, universities and employers a higher degree of confidence on the results shown on the certificates.
- 4. It forces schools to cover the whole syllabus and to the depth prescribed in the syllabus. Currently, the content and depth are determined by individual schools.
- 5. It provides a level playing field for all students and all schools, which we currently do not have.
- 6. It will eliminate cheating by teachers. Currently cheating is widespread.
- 7. Teachers will no longer be able to teach to the test.
- 8. It will eliminate bullying by some panelists to get their own way.

## Focus Question 1. School-based assessment.

I place zero value on school-based summative assessments, which by their very nature are open to manipulation and cheating. The system rewards schools that cheat and punish the honest.

With external exams contributing to 50% of a student's result, the other 50% needs to come from school-based assessment. 10% of the total assessment could come from practical reports and the other 40% from supervised exams. These supervised exams should be held at the end of semesters one and two for year 11 students and at the end of semester three for year 12 students. Assignments must not contribute towards the result, since authenticity cannot be guaranteed. A number of EIC submissions give compelling reasons why assignments must not be part of assessment mix in maths, physics and chemistry. I am also in favour of external exams being used to scale school-based assessments, as recommended by the EIC. Some of the disadvantages with school-based assessment are:

- 1. It allows teachers to teach to the test. This practice happens in many schools.
- 2. No two schools follow the same work program, teach the same topics, set the same assessments or mark them with equal objectivity. The playing field is uneven for students and schools. This is unfair to both.
- 3. Comparison of student performance and school performance is impossible to gauge.
- Cheating is widespread in schools. One way schools can cheat is by giving students the exam questions prior to the exams. This practice happens to a greater or less degree in many schools. Some teachers do it consciously while others subconsciously.
- 5. A number of EIC submissions have highlighted the problems associated with school-based assessments. Please read them and take them into consideration.

## Focus Question 3. Moderation.

I see no advantage in continuing with the moderation model that is currently operating.

Once we have 50% external exams, and school-based assessments are scaled by external exams, there is no longer a need to moderate school-based assessments. Schools will have no choice but to cover the entire content, set quality assessments and mark them professionally, and give students accurate feedback. Each school should be allowed to conduct its internal assessments the way it pleases. Whether a school's practices are effective or not will be highlighted by its performance in the external exam.

As many EIC respondents mentioned, current moderation processes are cumbersome and ineffective. They yield unreliable results. They are inconsistent not only within a district and across districts, but also from one year to the next. What is accepted as a good assessment instrument in one year is severely criticized by the same panel in the following year. What is considered an exemplary assessment item in one school or district is considered substandard in another. Panels from different districts have different interpretations and expectations and this is not fair to students or to schools. Most teachers and parents do not have faith in the moderation process.

Aggressive members of the panel often bully other panelists in order to get their own way. It is disappointing that our system has turned a blind eye to panel bullying for 40 years and continue to turn a blind eye.

"You scratch my back and I'll scratch yours" is also an approach commonly adopted among panelists in most districts.

A number of EIC submissions are critical of the moderation processes. The EIC's report points out the problems with the moderation process on pages 126-131. I strongly urge you to read these and take their views into consideration.

For 40 years other five states have had a good look at our system of social moderation and have wisely decided to stay right away from it. That must tell you something about social moderation.

By eliminating the unnecessary social moderation process, the department can save tax payers a substantial amount of money.

## Focus Question 4. Finer scale for school assessments.

My suggestion is that all assessment results be reported as a percentage. The reasons for this are:

- Teachers want to use percentages; students want to see percentages; parents want to see percentages; employers want to see percentages; universities want to see percentages; the only people who don't like seeing percentages are the education theorists.
- 2. Percentages are readily recognized and understood by everyone around the world.

- 3. Almost all other educational jurisdictions use them.
- 4. The real world uses them. Imagine a Nielsen poll showing on a two-party preferred basis a C+ for Labor and a C+ for the Coalition.
- 5. It discriminates students better than a 15-point scale of A to E ever can.
- 6. It enables averages and standard deviations to be computed, and computed accurately.

# Focus Question 5. Cross-curriculum capabilities.

My suggestion is that KCs be not tested.

- 1. Such tests are not subject-specific. The marks a student gets in physics should be determined by the student's performs in physics assessments alone. It is ridiculous to alter this by the student's performance in unrelated subjects or topics.
- 2. They severely disadvantage students from Non English Speaking Background and hence discriminate against them.
- 3. They cost a lot of public money for no apparent gain.
- 4. Some wealthy schools spend thousands of dollars on hiring mentors to coach their students. This is unfair on less wealthy schools.
- 5. Substantial amount of class time is lost due to schools spending time coaching students on rehearsing for these tests.

Thanks again for considering my submission.

Yours sincerely

Jeevan Soorya Dhas

23 April 2014.