SMC&PA Submission 249 Received: 13 May 2013

## SUBMISSION TO PARLIAMENTARY INQUIRY INTO ASSESSMENT METHODS FOR SENIOR MATHS, CHEMISTRY AND PHYSICS

As an interested citizen and as a mother of five children, I would like to provide my comments to the parliamentary committee re current assessment methods in the above senior subjects.

I would particularly like to comment on "student participation levels" and "the ability of assessment processes to support valid and reliable judgements of student outcomes" which are part of the Terms of Reference of the committee.

All of my five children (aged 18 to 32) have now completed their secondary education, so I believe that my observations over the many years of their secondary schooling, especially re assessment methods within education, are valuable.

I studied Maths 1, Maths II, Physics and Chemistry for my senior years, and have been amazed at how the assessment process has changed with time, perhaps not necessarily for the best.

## Internal versus external assessment:

My four older children were assessed internally as they attended a large co-educational school. All of these children studied maths and one of them also studied chemistry. As a parent, it seemed that there were endless assignments and exams, many of which seemed to be excessive in nature with only a small proportion of marks attached to each one. It often appeared that the results did seem quite subjective within these subjects.

My youngest child attended Hubbard's for his senior education, and so this was my first personal experience of an external exam situation. His senior experience was very positive and was targeted to a positive exam result at the end but with a minimum of fuss. He did not have innumerable assignments and exams to complete, but he still achieved admirable results in biology, chemistry and maths. My son completed his senior year with in depth knowledge and skills in biology, chemistry and maths, and is now keen to start a Bachelor of Science next year after his gap year.

I strongly believe that the external exam system should continue to be made available for students, as there should be no one size fits all approach. Choice is important at any stage of life and student needs vary.

Additionally, I believe that it would be very valid to use external exams for at least a half of the marks for maths and science subjects, which particularly lend themselves to objective assessment. This would make it fairer for all students, whether they be external or internal, private or state school students.

## Over-assessment of Maths and Science students:

My four older children completed their senior years at a private school and were I believe over assessed, particularly in years 11 and 12. Three of those children have now completed tertiary study and have often commented that Uni was easy after the huge workloads at the secondary level. Surely the workloads of senior students should not exceed the demands of tertiary education, but this seemed to be the case for all of them.

Many of my friends have made similar comments about the huge stress that their children were under during the latter years of their secondary education. My best friend's daughter who attended a state high school was completely exhausted and depressed at the end of year 12, and took several years to recover.

## Validity and reliability of the assessment process:

I personally believe that the existing system is too subjective, and too open to plagiarism among students.

It has continued to surprise me over the years that black and white subjects, such as maths and science have become more and more subjective in terms of assessment, with more emphasis on communication of ideas, which must make it incredibly difficult for teachers determining any one student's mark. I am not a teacher, but without some form of external exam for all students with just right or wrong answers for maths and science subjects, the whole system seems somewhat flawed to me.

In my profession of occupational therapist, much time and effort is put into ensuring that assessment processes are both valid and reliable so that outcome measures are accurate for all clients. I would personally like to see the senior assessment system changed so that there is more transparency and more consistency across education, for the benefit of all students.

Yours faithfully,	
Ros Eagles	