SMC&PA Submission 70
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To the Parliamentary Education and Innovation Committee

(I strongly support the ideas promoted by Professor Dirk P. Kroese.) My brief submission is appended here.

1 Wordy Responses.

Serious students of Mathematics look to the respite the subject can offer from the extended literary responses intrinsic to disciplines like English and History. Why should Mathematics, for centuries a survivor on a diet of expressions involving graphs, symbols, diagrams, hieroglyphics, and the like, be *force fed* the extended wordy responses such as are employed in the humanities. Genuine students of Mathematics relish the change and the variation from one discipline where verbosity is supplanted by the symbolic communication of the other. Mathematics requires the student to communicate, for sure, but that communication can be adequately effected in symbolic mathematical language. The aim of the teacher should be to impart mathematical concepts in a way that effects coherent communication in student responses in symbolic, not linguistic form. Assignments can still play a role in Mathematics but not in essay form.

2. Preparation for further study in Mathematics

With the move towards satisfying the 'new' criteria in Mathematics Assessments, opportunities for consolidation of basic concepts have been compromised. To this end the level of mathematics comprehension has declined if the tertiary mathematicians are to be believed. On more than several occasions tertiary lecturers in Mathematics have bemoaned the fact that they have to teach basics that they would have hoped were covered in high school. Exacerbated already by the increasing scope of the Mathematics syllabus, strong foundations are further thwarted by the 'woolliness' of the new assessment criteria. Time spent by teachers and students alike trying to come to grips with the vagaries of how work is going to be evaluated could well be spent forging the fundamentals that give a better understanding and appreciation of the discipline itself.

3. Extension to Primary Mathematics

Movement in the primary schools towards putting in place some of the assessment techniques in the high school will only aggravate the pupil's understanding of, and liking for Mathematics. As well, it will provide the parents with at best tenuous and lack-lustre feedback on their child's achievement. It should be borne in mind that such feedback, given in good faith by 'phased-out' teachers will be prone to inaccuracies, as in many cases when evaluating, teachers will vacillate between one achievement descriptor and another, in the end just guessing for the sake of getting it done. **Nothing can be more accurate than simply using carefully assigned marks for the item assessed, in lieu of agonizing over excessively wordy, cumbersome criteria-sheets to make the assessment.**

(The person submittimg to be acknowledged in the following way: *"a retired Head of Dept. of Mathematics from 1974 to 2003")*