

From: [REDACTED]
To: [Education and Innovation Committee](#)
Subject: [SPAM ?] Maths/Science Bog
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To the Chair of the Education and Innovation Committee: MP Rosemary Menkens.

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I have taught Science and Maths for 31 years in both South Africa and Western Australia. I am now retired but my wife and I [Dr Susan Hewitt – director Radiation Oncology T/ville Hospital] have a bright 11 year old boy in grade 8 going through the Queensland system of education. This is a new experience for us as the older three went through South African schools and Western Australian schools.

In simple terms we are appalled at the level, and direction of Science and Mathematics teaching and examining in this state. Quite frankly it is no wonder this state is behind other states in Australia and in general it is clear why Australia is behind the best in the world. There is absolutely no question the system here is lagging behind even the better schools in South Africa, where generally standards have dropped over the last decade.

The question as to why schools here are second rate boils down to **approach and philosophy** [political nonsense]:-

Much has been written lately in the press about the success of Asian education: particularly regarding schooling in Singapore and China. The main emphasis of these reports is that rigour/vigour, examinations, pertinent content and well qualified educationists, are the keys to quality education. Their approach is correct.

In contrast education in Qld is hampered by poor or inadequate syllabi, bureaucratic **Red** tape and a stultifying, suffocating approach from the Queensland Studies Authority [QSA]. In many ways this so called “ education body” acts in direct opposition to creating the standards required for high quality education and acts as a body for political social engineering.

For example the QSA requirements for examining and recording of students achievements are not precise and are best opaque. Symbols handed to pupils give very imprecise accounts of what they have attained. Imaging going shopping and the price of an article was given a symbol: A,B,C,D etc. How does one assess what the true cost of the article is? Accountants don't use symbols to decide on the tax one has to pay and clearly the ATO doesn't use symbols either. Exactness is required.

Clearly this system has to be thrown out and replaced with marks and percentages. Of course the QSA will provide some mumbo jumbo edu-babble to justify their second rate approach. The other main aspect where Asian students have an advantage over Queensland pupils is that **CONTENT is seen as king.**

Einstein did not come to his theory of relativity from a vacuum of content. Rather he knew, fully understood the facts and could apply the theory in practical ways. He consequently could make precise pertinent quantum leaps in creativity. The development of knowledge follows incremental steps as follows: recall of information, comprehension of such, application, analysis, synthesis and finally creativity coming last and this skill is dependent on all those other foundation formative steps. Instead of ensuring these formative foundations are laid down, the QSA is playing around with children's education with their Extended Response Tasks [ERTs] and Extended Experimental Investigations [EEIs]= open ended tasks in Mathematics, Physics and Chemistry which soak up valuable important teaching time. While contextual learning has its merits, pupils in Queensland schools are compelled by the QSA to research information and undertake tasks and experiments they are not qualified to do. We are talking about 15/16 year

olds not 4th year university students. To be blunt it is putting the cart before the horse and even year 8 pupils are being subjected to this aspect in “ learning to writing up experiments with critical appraisal”. In most cases these ERTs and EEIs become defacto or at best camouflaged English assignments : not mathematical or Scientific applications of taught information. The bottom line is that they are of dubious educational value in these subjects and where the assessment criteria set by the QSA emphasise the ability to write well rather than the ability to apply their knowledge in physics, chemistry and maths. The Sciences are vast areas of knowledge today and increasing rapidly. Why make it harder for pupils to become knowledgeable, efficient and appreciate these vitally important and difficult subjects by burdening them with time consuming nonsense; plain stupidity by people who seem not to appreciate what education is all about.

In essence what I am saying is get back to teacher directed education with examinations to test pupils understanding of the knowledge transferred. Get rid of EETs and EEIs and speed up pupils uptake of Maths and Science by good educational teacher input. Do what Asian schools are doing for the sake of pupils and reduce the load of teaching staff under the current QSA system. Let teachers pass on what they know and absorbed at university.

Nothing is more demoralising for young intelligent pupils and teachers than the system imposed on them by the QSA. No one wins under the current QSA system. Get rid of the QSA or direct them to alter the system. If not our schools and pupils will continue to be put off science and maths and the spiral downhill will continue and we will truly become the White Trash of Asia. Coming from overseas and having taught in some of the best schools in WA [Scotch College and Wesley College] and certainly the best in South Africa; it is very evident to me and my wife who went through the British System, things are seriously out of kilter here and must be improved for the sake of the children, not the bureaucrats of the QSA.

Thanking you for your time.

Merv Myhill.

BSc; UEd; BEd; Med.