



📷 Professor Michelle Simmons with a device few of us can comprehend

Tim Blair Blog Posts

PHYSICS NEEDS NUMBERS

Tim Blair, The Daily Telegraph
January 26, 2017 2:08am

Replacing physics formulae with essays is like using numbers to discuss literature, as atomic electronics expert Michelle Simmons realises.

The *Daily Telegraph* [reports](#):

Professor Michelle Simmons has told of how she was “horrified” to find the nation’s high school physics curriculum had been “feminised”, describing the change as a disaster.

Prof Simmons used her Australia Day address at the Sydney Conservatorium of music to declare that the current system was leaving students “ill-equipped for university”

“One of the few things that horrified me when I came to Australia was to discover that, several years ago the high school physics curriculum was ‘feminised’,” she said.

*“In other words, to make it more appealing to girls, our curricula designers **substituted formulae with essays**. What a disaster ...*

“I see many students complaining that the physics curriculum has left them ill equipped for university.”

Prof Simmons subsequently offered an example of the curriculum changes she opposed:

*“It’s being asked to write an essay on **what’s the impact of a nuclear power plant on the environment**,” she said.*

“It’s more of a descriptive essay than actually saying ‘how does a nuclear power plant work and describe its operation’, maybe give a problem that it solves. It’s that sort of thing.”

Any idiot, me among them, can write an essay. Nailing the numbers is rather more difficult. This issue is [soon to be addressed](#):

Professor Simmons’s broadside won the support of the NSW Education Standards Authority – the former Board of Studies – which said new science courses to be introduced from next year “address the exact concerns” she had expressed.

A spokesman said the new physics and chemistry courses, which would be examined at HSC level from 2019, “have a greater focus on mathematical applications as a way to describe the concepts and a strong emphasis on practical investigations”.

“There has been a reduction in the history/sociology-based content and an emphasis on practical investigations,” the spokesman said. “The philosophy underlying all science courses is to learn through practical engagement.”

He said an extensive consultation process had seen the move “overwhelmingly endorsed by science teachers” and there would also now be a five-year review process “ensuring syllabuses remain relevant and current”.

*Australian Mathematical Sciences Institute director Geoff Prince also backed her comments. “The penetration of maths into science has been inadequate for a very long time,” he said. **Physics should be “loaded with maths”.***

Yes.