



📷 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.