

21/03/2024

## Re: Position paper - Relieving Out-Of-Field Teaching in Australian Secondary Mathematics

I write to express the strong endorsement of the Australian Institute of Physics for the position paper "Relieving Out-Of-Field Teaching in Australian Secondary Mathematics", dated March 2024, prepared by the Actuaries Institute, the Australian Mathematical Sciences Institute, the Australian Mathematical Society, the Mathematics Education Research Group of Australasia and the Statistical Society of Australia.

Mathematics is of foundational importance to all areas of STEM, and hence vital to Australia's economic and social future. We need widespread mathematical literacy to underpin Australia's competitiveness in the global knowledge and innovation economy.

The Australian Institute of Physics (AIP) is the national professional body for physics. Our members have noted, with increasing concern, many of the issues highlighted in the position paper. Mathematics is the language of physics, and a critical component of any physics training. The AIP's accreditation of university physics programs requires students to undertake a substantial program of tertiary level mathematics. Reduced quality and availability of high-school mathematics training directly impacts the pipeline of students into the physical sciences.

The shortage of high-school mathematics teachers in Australia has reached crisis point. The teaching of mathematics classes by out-of-field teachers is prevalent in Years 7-10, the crucial period when students start to consider subject choices and career paths. Moreover, the lack of suitably trained teachers is particularly severe in socio-economically disadvantaged areas, entrenching disadvantage and lack of opportunity. As a result, strategies to support and up-skill out-of-field teachers are desperately needed.

The approach outlined in the position paper is a pragmatic and much needed short-term solution. The Australian Institute of Physics fully endorses this approach.

Yours sincerely,

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