

Australian Council of Deans of ICT

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ACARA Technologies Consultation

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ACDICT Position on Technologies for ACARA

The Australian Council of Deans of ICT (ACDICT) – the peak university academic body for ICT in higher education – is pleased to make a brief submission to the Australian Curriculum, Assessment and Reporting Authority (ACARA) with respect to the Draft Shape of the Australian Curriculum: Technologies. We support the national curriculum and the need for ICT to be part of the curriculum. Insufficient numbers of talented students are choosing ICT courses at university relative to Australia's needs for skilled ICT professionals. Schools and the curricula need to play a role in encouraging talented students to choose ICT.

The place of ICT in the curriculum is not straightforward. There are (at least) two components that demand consideration – the need for basic ICT literacy and skills, and the need for ICT concepts covering topics such as computational thinking, algorithms, processes, and handling large data sets safely and securely.

ACARA has recognized this in the draft curriculum by splitting ICT into a skills strand (Digital Technologies) which can be distributed among subjects thereby enabling digital technologies to be embedded in all disciplines and students learn to use ICT in context across the curriculum, and a Design and Technologies subject where students should learn to analyse systems so that they are able to discern good features from poor ones and the approaches used to achieve them.

To achieve those aims, ACDICT recognizes that teachers across all years and disciplines need to be competent and enthusiastic about the use of ICT in their disciplines, and that trainee teachers need to have relevant ICT knowledge and skills.

Given the importance of ICT across all disciplines, ACDICT believes that the connection from ICT to maths and science is insufficient because ICT is so fundamental to these disciplines. For example, we are disappointed that ICT did not feature at all prominently in the Chief Scientist's recent report 'Mathematics, Engineering & Science in the National Interest.' ACDICT would hope that national curriculum discussions will ensure that there will be suitable linkages from ICT to maths and science curricula. We will be making another submission to the maths and science curriculum review.

ICT in Education groups are arguing for a Design and Technology subject throughout the curriculum to increase visibility of ICT and provide greater opportunity to teach ICT concepts rather than ICT literacy. We welcome this as a practical opportunity to embed ICT throughout the disciplines and demonstrate its contextual relevance.

In this regard, ACDICT is concerned about the current teacher training system and being able to find suitable teachers that are able to include systems thinking within and across disciplines which is currently missing.

Yours sincerely

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