Dear Sir

The Australian Council for Computers in Education (ACCE) wishes to raise the issue of the teaching of information and communications technology (ICT) within Australian schools and the capacity of the emerging Australian Curriculum to prepare students to engage with the knowledge economy. These matters are addressed to you and your colleague, Mr Christopher Pyne, MP, as the members of your party responsible for the digital economy and education portfolios respectively.

The ACCE is the national professional body for those involved in the use of information and communications technology in education. It was formed in 1986 to foster the teaching of computing/information technology subjects and to support all educators who strive to improve student learning outcomes through the powerful use of ICT.

ICT is essential to the operation of all modern economies. It is integrated into the daily lives of Australians and is pervasive within the operation of business enterprises. Recent reports from the Australian Bureau of Statistics show that ICT is almost ubiquitous within Australian firms of all sizes and increasingly present in Australian homes. The future prosperity of Australia will be affected by the way that we plan for the use of ICT within our economic and social future.

Therefore it is critical for Australian schools to ensure that all students gain the ICT skills necessary to participate in the economy of the future. Within the term of the Howard Government, the education Ministers collectively agreed on a Statement of Learning for ICT and more recently the development of the Australian Curriculum has recognised ICT as an essential general capability within all subjects. These initiatives support the concept of all students being competent users of ICT. This is endorsed by the ACCE.

However, the future economy of Australia is also highly dependent on our ability to generate new forms of ICT application in our current industries and in the creation of new forms of digital economy. That future requires some part of the workforce to be highly skilled generators of ICT applications and these careers have their foundations established within school.

The ACCE is concerned that the current progress in developing the Australian Curriculum is likely to overlook this aspect of ICT education. The initial focus of the Australian Curriculum has been
heavily targeted on the subjects traditionally taught in schools. The staggered development of subjects grouped into sequential Phases mean that the subjects in Phase 1 (English, Mathematics, Science and History) and Phase 2 (Geography, Languages and the Arts) have already consumed the majority of time available for student learning in schools.

Subjects, such as ICT, left to Phase 3 of the development are now expected to compete for the limited time remaining. The ACCE believes that this has negative consequences for ICT as a discipline in schools and a negative impact on Australia’s digital economy.

There is already a serious issue in the lack of entrants into computing science courses at Australian universities. The subsequent lack of computing science graduates condemns the future economy in Australia to be dependent on ICT applications developed in other countries and inhibits Australia’s competitive position in a global digital economy. Further reduction of the formal study of ICT as a discipline in the secondary years of schooling will contribute to a continued decline in the relevant university enrolments and exacerbate a shortage of computing science graduates.

A forthcoming report from the Australian Computer Society highlights the continuing negative trade imbalance between Australia’s consumption of imported ICT products and the much weaker export trade of ICT products created in Australia. A long term solution to this economic threat requires greater support for the development of a professional ICT workforce.

The ACCE is therefore keen to be informed of the approach that the Liberal Party of Australia will adopt regarding ICT as a specific discipline of study within an Australian Curriculum and its impact of the future development of the digital economy in Australia. I would appreciate a response within sufficient time to distribute it before August 21 to the thousands of teachers, school administrators and teacher educators that ACCE represents.

The ACCE also wishes to express its willingness to assist with advice and engagement on the issues associated with ICT in education and to draw upon the expertise within its membership base.

Yours faithfully
Tony Brandenburg
President, Australian Council for Computers in Education