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To: Australian Curriculum Assessment and Reporting Authority
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AUSTRALIAN CURRICULUM ASSESSMENT AND REPORTING AUTHORITY

ISOC-AU is pleased to respond to the invitation to comment on the draft curriculum documents as part of the Australian Curriculum Assessment and Reporting Authority consultation process.

ISOC-AU is a non-profit society founded in 1996, which promotes the Internet development in Australia for the whole community. ISOC-AU is a chapter of the worldwide Internet Society and is a peak body organisation, representing the interests of Internet users in Australia.

ISOC-AU's fundamental belief is that the Internet is for everyone which takes into account agendas in education, training, equity and access especially access by disabled persons, digital literacy and computing skills among other more technical areas of concern such as IP v6 and the National Broadband Network.

We provide broad-based representation of the Australian Internet community both nationally and internationally from a user perspective and a sound technical base. We have a longstanding and ongoing commitment to the effective representation of these interests in self-regulatory processes in the telecommunications, domain name and Internet-related services industries.

Response to the invitation to comment on the draft national curriculum statements

The comments of the Internet Society of Australia about the draft national curriculum statements are focussed in three areas which are:

- the Melbourne Declaration which outlined the educational goals for young Australians,
- the skills that are needed by young Australians in the 21st century and
- digital technology skills.

Melbourne Declaration

The *Melbourne Declaration on Educational Goals for Young Australians* (MCEETYA, 2008) provides the articulation of the educational goals for students in schools in Australia. These

goals provide a mandate and guide for schools in the curricula that are necessary for schools to teach and assess. The Melbourne declaration made four important points about digital technologies which are:

- Young people need to be highly skilled in the use of ICT (p. 5)
- Schooling should also support the development of skills in areas such as social interaction, cross-disciplinary thinking and the use of digital media, which are essential in all 21st century occupations. (p. 5)
- Successful learners have the essential skills in literacy and numeracy and are creative and productive users of technology, especially ICT, as a foundation for success in all learning areas (p. 8)
- As a foundation for further learning ... the curriculum will include practical knowledge and skills development in areas such as ICT and design and technology.

(MCEETYA, 2008, p. 13).

The Melbourne Declaration is clear that 21st century skills are needed for the use of ICT, digital media, social interaction, literacy, numeracy, creation and production, and design. One could reasonably expect that these skills would therefore be included in a curriculum that looks to the future for Australian students.

The draft national curriculum statements would appear to portray traditional content within the four disciplines of English, mathematics, history and science. The English curriculum statement includes the potential for the use of digital technologies as a means of accessing multimodal text, whereas the science statement includes the use of digital search and a capacity for collaboration. Neither the mathematics nor the history curricula statements would appear take a position on the use of digital technologies nor encourage its use.

The national curriculum statements do not appear to be consistent with the *Melbourne Declaration on Goals for Young Australians* (2008) from which excerpts related to the use of digital technologies have been stated above. If education is to serve Australians into the future then the use of digital technologies and the skills to use them would appear to be essential. However, this would not seem to be a concern in the draft national curriculum statements which is somewhat puzzling.

Skills for the 21st Century

A number of international groups have crystallised the skills that are needed for students in the 21st –century. Perhaps the best known is the US based *Partnership for 21 Century Skills* (2009) project which states that the following skills are needed for the 21st century and therefore need to be taught in schools. They are:

- Core subjects and 21st Century themes
- Learning and innovation skills
- Information, media, and technology skills, and
- Life and career skills.

(Brooks-Young, 2010, p. 6).

The work of the *Partnership for 21 Century Skills* project supports the apparent intention of the *Melbourne Declaration on Goals for Young Australians* (2008) quoted above in that digital technology skills are essential for future development.

Digital technology skills

The Internet Society of Australia would expect that such a significant effort as the development of a national curriculum for Australian schools would consider the inclusion of essential skills to productively use digital technologies. The Internet Society of Australia contends that these skills include:

- The technical skills to use computers, the internet and its services, and core multimedia devices,
- Information skills including search, authenticity, accuracy, relevance, critical analysis and innovation,
- Digital literacy including online reading skills and the skills of production and use of multi-modal information, and
- Collaboration skills including the skills and capacity to productively, safely and ethically interact online.

There is a need for students to learn how to use digital tools in a structured and disciplined way.

As the national curriculum is about what to teach, then it is reasonable to expect that the skills associated with the use of digital technologies are included. However, the pedagogical skills of how to teach would be expected to be the domain of professional educators and teachers guided by the content of what to teach from the national curriculum.

Conclusion

The Internet Society of Australia (ISOC-AU) would contend that from a reading of the draft national curriculum statements that there is very little emphasis on the use of digital technologies. The English statement makes mention of the use of multimodal text and media in its introduction but throughout the statement there is minimal attention given to or guidance about digital literacy or visual grammar. The Science statement goes further and includes the use of research and collaboration using digital technologies which is consistent with the scientific tradition of building on the work of others. However, the mathematics and history curricula would appear to place minimal emphasis on the use of digital technologies.

The Internet Society of Australia would urge the drafters of the national curriculum to pay more attention to the research which is unequivocal about the benefits of the use of digital technologies. For example, the OECD (2006) study *Are Students Ready for a Technology-Rich World? What PISA Studies Tell Us* is quite clear that 'with the right skills and background, more frequent computer use can lead to better performance' (p. 13).

The current drafts of the national curriculum statements would appear to be based on traditional content disciplines. The Internet Society of Australia would hope that a more dynamic and forward thinking curriculum with emphasis on skills for the 21st century, including the use of digital technologies and consistent with the *Melbourne Declaration on Educational Goals for Young Australians* would emerge from the current consultations.

Additional note

As an additional note, the Internet Society of Australia notes that the ACARA website (<http://www.australiancurriculum.edu.au/Home>) fails to meet the mandatory government web standards including HTML validation and accessibility for disabled persons.

Bibliography

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We will be happy to provide further comments on issues raised.

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