

# TECH TALK FOR PRINCIPALS

Edition 3, April 2017



Welcome to the third edition of *Tech Talk For Principals*, your E-Newsletter helping you to understand and navigate digital technologies in schools. In this issue, we discuss digital literacy. Everyone is talking about it and how important it is, but many schools lack the resources and time to invest in developing a robust program for their students. There are alarming new statistics on how digital literacy will impact the careers of today's students. But first, a definition:

## What is digital literacy?

Hague & Payton (2011), define digital literacy as possessing the *“skills, knowledge and understanding that enable critical, creative, discerning and safe practices with digital technologies. It is about cultural and social awareness and understanding, as well as functional skills. It is also about knowing when digital technologies are appropriate and helpful to the task at hand, and when they are not.”*

The very basics of digital literacy include the comprehension of the function of computers and their programs along with other pieces of technology. This includes coding, hardware navigation, website, game and app building and more. But digital literacy covers a far wider spectrum of knowledge and application of skills. It introduces a way of thinking that is not covered in other subject KLAS. Some of the finer skills acquired on the path to digital literacy include higher order thinking, problem solving, algorithmic thinking, working memory and creativity.

## Benefits of digital literacy

A recent report by the UK House of Lords highlights how crucial digital literacy is for 'future proofing' young people. Their findings<sup>2</sup> include:

1. Digital literacy fosters creativity and innovation, underpinning job creation
2. Digital literacy complements traditional literacy and more effort is needed to lift outcomes across all domains
3. Digital literacy is important not only in schools but also in further education
4. Stronger links need to be made between industry and education providers
5. There needs to be universal access to digital technologies and for all people to have access to digital literacy learning opportunities. *Read more...*

The Foundation for Young Australians, authors of *The Future of Work Report* and *The New Basics*, stated that:

***“Australia’s 4.3 million young people are our greatest resource. It is the next generation who will inherit the outcomes of the decisions we make today and will have to navigate a future we can’t yet even describe. As our population ages, the ability of our growing youth population to participate in, contribute to and shape our economy will be crucial in delivering a quality of life for all of us.”***<sup>3</sup>

Essentially, the future of this country is dependent on the education and future career paths our current students take. With the proliferation of digital technologies in everyday life and the ever increasing ‘internet of things’, it is not just important that we find a way to deliver a robust digital literacy education to our students today, it’s imperative.

## Four big statistics on the future of careers

1. More than 90% of Australian jobs will require digital literacy in the next 2–5 years. At least 50% will need advanced skills to configure and build systems<sup>5</sup>.
2. Future jobs that are predicted to request ‘digital literacy’ exceed current demands by more than 600%<sup>5</sup>.
3. Wages are significantly higher for young job seekers with digital literacy skills<sup>4</sup>.
4. 47% of current jobs are at high risk of being redundant due to the likelihood of computerisation<sup>4</sup>.

### References

1. Hague, C. & Payton, S., 2011 Digital literacy across the curriculum, Curriculum & Leadership Journal, Volume 9, Issue 10.
2. Make or Break: The UK’s Digital Future, UK House of Lords, 2015. [www.publications.parliament.uk/pa/ld201415/ldselect/lddigital/111/111.pdf](http://www.publications.parliament.uk/pa/ld201415/ldselect/lddigital/111/111.pdf)
3. [www.fya.org.au](http://www.fya.org.au)
4. [www.fya.org.au/wp-content/uploads/2015/08/fya-future-of-work-report-final-lr.pdf](http://www.fya.org.au/wp-content/uploads/2015/08/fya-future-of-work-report-final-lr.pdf)
5. [www.fya.org.au/wp-content/uploads/2016/04/The-New-Basics\\_Update\\_Web.pdf](http://www.fya.org.au/wp-content/uploads/2016/04/The-New-Basics_Update_Web.pdf)
6. [www.oxfordmartin.ox.ac.uk/downloads/academic/The\\_Future\\_of\\_Employment.pdf](http://www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf)

## Three statistics on digital literacy in Australian schools

1. Close to a third (27%) of Australian fifteen year olds have low proficiency in digital literacy, as found in international testing by PISA<sup>5</sup>.
2. Australian students have a significantly less positive attitudes towards computers than on average across the OECD<sup>5</sup>.
3. Australian students from the most disadvantaged backgrounds reported the least positive attitudes towards computers<sup>5</sup>.

Educators are becoming increasingly aware of the importance of providing today’s students with a digital technologies education, equipping them with the language of the future and levelling the playing field for job seekers.

The FYA research is backed by findings from both PricewaterhouseCoopers, and Deloitte Access Economics for the Australian Computer Society revealing that many of the jobs people work in today ***“simply won’t exist in the next decade”***.

They highlight the importance of digital skills for future career pathways of this next generation.

The FYA predict that:

***“To manage this demand and ensure Australia’s young people can thrive in this environment, the next generation need to not only know how to operate technology, but how to create and manipulate it as well. Our children may be able to operate a smart-phone with ease, but what they need is to learn how to build it.”***<sup>4</sup>

Digital literacy is a matter of high importance for educators, to ensure that students today are equipped with the skills, knowledge and thinking processes that will be required for their future careers.

**With 47% of today’s jobs at risk of redundancy due to digital displacement<sup>6</sup>, the time to act is now!**