Digital Fluency in Open, Flexible and Distance Learning

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Abstract

Digital fluency affects us all—our world becomes more online, our skills for navigating this world may determine how well we participate, contribute and succeed. In this editorial we look at the Digital Technologies Hangarau Matihiko Curriculum, which is being introduced to primary and secondary schools in New Zealand, and ask what it means for the open, flexible, and distance learning sectors. We also celebrate the JOFDL Best Paper Awards for 2018, which were presented at the biennial FLANZ Conference in Palmerston North earlier this year. The editorial is rounded off with an overview of the articles in this issue.

Keywords: open learning; digital literacy; digital fluency; Digital Technologies Curriculum

Introduction

Digital literacy, digital fluency, and digital citizenship are now a major focus in the New Zealand education sector. They permeate all aspects of education, appear at all levels, and have an increasing presence in the national media. At the same time, we see an increase in the digital fluency of students throughout New Zealand. Government initiatives, such as the Digital Technologies Curriculum, provide the basis for this hugely important part of modern education, preparing students for the world of today and tomorrow.

There are many challenges in making changes this big, but there will be even more challenges if we don't make them. In education, the immediate impact will be on the primary and secondary sectors where these new curricula are being rolled out, but the wider-reaching effect will be on the tertiary sector, and on open, flexible, and distance learning. In New Zealand society, the longer-term effect may be far more widely felt.

Digital Technologies Curriculum and OFDL learning

Digital fluency will become an inescapable part of life—as educators, it is part of our work; as parents it is part of our children's education; and as citizens it promotes and influences the way we and everyone else contributes in our democracy. The Digital Technologies Curriculum is designed to move students beyond the stages of digital proficiency and digital literacy into digital fluency. Differentiated steps lead students from simply having skills in digital technologies (digital proficiency), to knowing how to use technology effectively and efficiently (digital literacy), to knowing when and why to use technology and to create what is needed to solve specific problems (digital fluency).
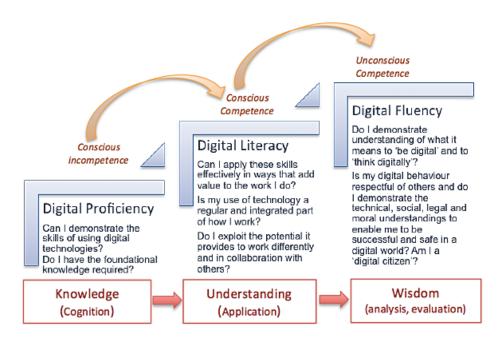
Figure 1 Digital fluency

(Derek Wenmoth, CORE Education. (2016). Used with permission.)

The Digital Technologies Curriculum is set in this context. Chris Hipkins, Minister of Education, outlines the rationale:

> One of my goals as Education Minister is to make sure we are future-proofing our education system. This means we need to change the way we do things to keep ahead of changing technologies.
>
> The digital curriculum content positions us as global leaders in education, meeting the needs of a digital and fast-paced world and making sure our students will be job-ready when they graduate.
>
> Young people will learn how digital technologies work and will develop critical thinking skills and learn key competencies such as collaboration, communication, problem solving, and ethical and safety awareness.
>
> The Hangarau Matihiko curriculum content connects traditional Māori practices and knowledge with digital confidence. The Hangarau concepts reinforce the importance of understanding the past to inform future practice for people and the environment.
>
> <div align="right">Chris Hipkins, [Press release], 8 December 2017.</div>

There is a wealth of information available on the Digital Technologies Curriculum. For those not already fully immersed in this education directive or the concepts surrounding it, the following sources from the New Zealand Ministry of Education are a good place to start:

- The NZ Curriculum Online: Technology.
  http://nzcurriculum.tki.org.nz/The-New-Zealand-Curriculum/Technology
- Digital Technologies and the National Curriculum – What's it All About?
  http://elearning.tki.org.nz/Teaching/Curriculum-areas/Digital-Technologies-in-the-curriculum

- Strengthening Digital Technologies: Hangarau Matihiko in the Curriculum.
  https://education.govt.nz/ministry-of-education/consultations-and-reviews/recent-consultations-and-reviews/digital-technology-consultation/
- Digital Fluency.
  http://elearning.tki.org.nz/Teaching/Digital-fluency
- Digital Citizenship.
  http://elearning.tki.org.nz/Teaching/Digital-citizenship

Content and professional development supporting the Digital Technologies Curriculum has been available to teachers from January 2018, and all primary and secondary schools are required to be teaching it by 2020. A myriad of commentary, questions, and resources are appearing, and the literature surrounding this initiative and its implementation is burgeoning.

The question asked in this editorial, however, is about the impact of this initiative on the sector of open, flexible, and distance learning. We believe the days of the discrete difference between face-to-face learning and distance learning were over when flexible learning started to combine aspects of both. The rise in digital technologies has made this difference even more difficult to discern as digital technology makes face-to-face contact possible over an online connection for both physically remote and physically present students, and flipped classroom models provide remote-use resources for both types of students. Students may, for the sake of convenience, necessity and variety, use both face-to-face and remote learning to gain wider curriculum experience and more flexible delivery and interaction in their education. The differences between the two types of learning will diminish and the overlap will increase. There will be more change and more connection for both groups.

We believe OFDL educators would be well advised to do three things as we move forward with this new educational focus in New Zealand:

1. Be informed: Understand the changes and be aware of what is happening across the whole education sector.
2. Be included: Look for opportunities to be included in discussions and decisions affecting your own educational specialty.
3. Be involved: Be an active participant in, and contributor to, your own area of education and beyond, helping everyone to make the most of the possibilities realisable through digital technologies.

JOFDL Best Paper Award 2018

The journal's editors have again taken the opportunity provided by the FLANZ biennial conference to officially recognise the authors of the best papers published in JOFDL in the preceding 2 years. There are several dimensions to the JOFDL Best Paper Award: it is a way to celebrate the achievements of the best writers contributing to this journal, a way for the journal to highlight the best piece or pieces of research and writing it has recently published, and a way to signal to readers which articles may be worth a second look within the journal's contents.

A panel of three deliberated over the choice of Best Paper 2018, using a multi-faceted approach to identify possible candidates for the award. Criteria used to select the Best Paper were those outlined in the JOFDL editorial in issue *18*(2) http://www.jofdl.nz/index.php/JOFDL/article/view/237/178 which accompanied the announcement of the inaugural award in 2014.

The Best Paper Winner for 2018 is:

- **Kamila Hoffmann-Dumieński**, for her 2016 paper "Professional Development Across the Islands of the South Pacific: A Perspective of a Blended Learning Facilitator". http://www.jofdl.nz/index.php/JOFDL/article/view/278

There are also three highly commended articles:

- **Mark Nichols,** "Reading and Studying on the Screen: An Overview of Literature Towards Good Learning Design Practice" http://www.jofdl.nz/index.php/JOFDL/article/view/263
- **Jo Tilton and Maggie Hartnett,** "What are the Influences on Teacher Mobile Technology Self-efficacy Within Secondary School Classrooms?" http://www.jofdl.nz/index.php/JOFDL/article/view/279
- **Becky Sue Parton,** "Video Captions for Online Courses: Do YouTube's Auto-generated Captions Meet Deaf Students' Needs?" http://www.jofdl.nz/index.php/JOFDL/article/view/255

Our congratulations go to these writers for their achievements!

Articles in this issue

This issue contains two interesting articles from different areas of the globe, and this editorial. Other articles, including some developed from presentations at the recently held 2018 FLANZ Conference, are being gathered for the next issue, which will be released later this year. Articles in the current issue are described below.

The first article by Chellepan, van der Meer, Pratt, and Wass outlines results from a study exploring factors that may influence tertiary teachers in deciding whether to use a flipped classroom model for their teaching. In the flipped classroom model, students are generally encouraged to engage with learning resources ahead of scheduled class time, and the class time is used to focus on active learning and discussions that support and build on the learning already done. This research goes beyond the practical question of *how* to flip a classroom and the theoretical question of *why* to flip it. It instead looks at the considerations made in real situations by teachers who have the option of choosing the best method to deliver education in their own classrooms. This research looks at the flipped model in the tertiary setting and in the context of New Zealand. It reports on the findings from a survey and is part of a larger research project.

Zeglen and Rosendale have contributed an article that looks at methods of increasing online information retention by using visual hints and feedback in educational games. The research is based in the United States (as are the authors) and is set in the tertiary sector. Their focus is on the gains lecturers and course designers can make in student achievement levels by carefully incorporating visual hints and feedback in the learning process during online engagement. The study considered how including hints and feedback enhanced the cognition and knowledge retention of three groups of tertiary students. The study involved 65 students, all studying at tertiary level in the United States. Students were divided into two treatment groups and one control group, and testing was conducted to gain results that provide a useful contribution to the literature of best practice in using educational games and online learning.

Conclusion

Digital fluency will not remain the pre-requisite for a brave new world – it will become a normal education for business as usual. We have sought to identify what this means beyond the immediate implementation of the Digital Technologies Curriculum, and ask those in the OFDL sector to consider what flow-on effects need to be considered now in their own specialty areas of education. Nothing exists in isolation; we are all part of the whole. This editorial asks educators in the OFDL sector to contemplate what this means, as the ripples are already spreading in this sector, and we need to be informed and considered in our actions and reactions to the changing nature of education in New Zealand.

References

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Wenmoth, D. (2016). *CORE Blog: Three Tips for Becoming a Digitally Fluent Educator*. Retrieved from http://blog.core-ed.org/blog/2016/08/three-tips-for-becoming-a-digitally-fluent-educator.html

Biographical notes

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