Leveraging the potential of digital in a post COVID-19 world:

Digital Agency

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How to reference this report

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1. Background

This is one of a series of papers written to help inform thinking about how we might leverage the potential of digital in a post COVID-19 world. Much of the material was written prior to the outbreak of the COVID-19 pandemic which forced the closure of schools and required a shift of teaching and learning activity into the online environment. This shift has highlighted the importance of digital technologies as a means of 'bridging the gap' in a remote teaching and learning context, and further, the importance of digital skills and capabilities to ensure these things are used appropriately and to good effect.

The premise for this series of papers is that at all levels of our education system we must ensure that our policies and supports are designed to foster digital agency in learners and educators. The COVID-19 response has highlighted more than ever before that digital infrastructure and tools must support effective affordances to students and teachers – meaning that users know intuitively how it is useful and what to do with it, how it can open up new and different ways of learning, well beyond the classroom.

According to the recent Curriculum, Progress and Achievement MAG Report, digital technology, and the efficiencies it enables, supports educators across the system to:

- easily access high quality resources that support curriculum, progress, and achievement

- access and use smart tools for designing, enacting, and inquiring into curriculum, progress and achievement

- connect with groups of educators grappling with similar issues to themselves

- contribute and share their knowledge and insights.

The intention of the papers in this series is to provide guidance around what is required to enable an environment with equitable access to internet connectivity, digital devices, and information-sharing tools and processes that use the affordances of digital technologies and do not increase (and may reduce) teacher workload. New Zealand has yet to achieve full digital inclusion so consideration is given to the design for digital learner materials and digital online professional learning to ensure all learners are catered for.

These things have taken on a new significance as we have experienced the shift to an online world in response to the COVID-19 crisis. While we may expect a return in the future to where learners and teachers will resume activity in their physical spaces of learning, the need for a more comprehensive plan of action for how we can best utilise the potential of digital technologies and the online environment to achieve our goals as learners, as teachers and as a system has certainly increased in prominence in the minds of many educators and others supporting the notion of a more accessible, equitable and quality education provision in New Zealand.

2. Introduction

Over the past thirty years of ICTs being used in NZ schools there has been a constant evolution of the language being used, starting with a focus on learning the skills use these new technologies, developing competence in using applications such as spreadsheets and word processors to supplement or augment what was already being taught.

The focus of this paper is to introduce the concept of *digital agency* as a way of thinking about the role of digital technologies in our education system. I argue that our digital policies and our design of supports for teachers and learners must foster digital agency to ensure a sustainable future for our learners, our teachers, our education system and our nation.

3. What is agency?

The dictionary defines agency as having choices and the power to act on those choices. It is about acting rather than being acted upon, shaping rather than being shaped and choosing rather than having to accept the choices of others.

The interest in 'agency' in education reflects the increased focus on "learner-centredness" and "personalised" approaches to teaching and learning that have emerged in our educational policy and practice in recent years. Much of this stems from the growing concern that many of our current structures, systems and practices actually work against the development of agency in our learners – and our teachers.

A modern education system must develop in learners (and teachers) the capacity to be problem solvers, collaborators, innovators, creators etc. if we are to address the challenges that we face in an increasingly complex and uncertain world. Such capabilities are characteristic of agentic ways of working. Unfortunately they have not always been promoted or enabled in a system where the focus has been on the 'delivery' of information, or the 'transfer' of knowledge from the one who 'knows' to the one who doesn't (yet).

A review of the literature on agency suggests it is achieved when:

- Learners have choices and they have the power to act on those choices.
- Learning depends on the activity and the initiative of the learner, more so than on any "inputs" that are transmitted to the learner by a teacher or a textbook.
- Learners move from being passive recipients in the learning process to being more actively involved in the decisions about their learning.
- Learners hold a personal sense of that agency – a belief that their behaviour can make a difference to their learning in that setting.
- Everyone in the process sees themselves as learners (students, teachers, parents, etc.).

Inspiration for this thinking has come from a number of theorists over the years. John Dewey argued that students should develop a powerful sense of self control, one that is ordered by intelligence and purpose. Paulo Friere argued that education should equip students with a critical consciousness of the world and how they could make a difference in that world. Friere argued that learning should be a participative, interactive and dialogic process, leading to a dynamic combination of reflection and action.

More recently contributions such as Angela Duckworth's "Grit" and Carol Dweck's "Growth Mindset" have highlighted the importance for learners of them seeing themselves as open to learning, and how this belief in one's agency is fundamental to learning.

Some teachers have expressed concern that agency means abdicating responsibility and letting learners loose to do what they want. This view reveals a lack of understanding of the full extent of agency:

- Agency involves initiative or self-regulation by the learner (or group).
- Agency is interdependent, that is, it mediates and is mediated by the sociocultural context.
- Agency also involves taking responsibility, personally and collectively, for the environment that is shared by all.

In simple terms, the notion of 'agency' may be understood as having the 'power or capacity to act on the choices one has'. Arguably, much of our traditional education system reflects its origins as an industrial age response to the need to produce literate and numerate people to work in the factories. Learners grouped into age-based classes, promotion through the system based on age and / or achievement, a standardized curriculum to ensure conformity etc. In such a system the agency of the learner is not considered, instead the system is premised on the belief that 'we' know what is best for you, and 'we' will make the decisions that are in your best interests in terms of where you'll learn, what you'll learn and how you'll learn it.
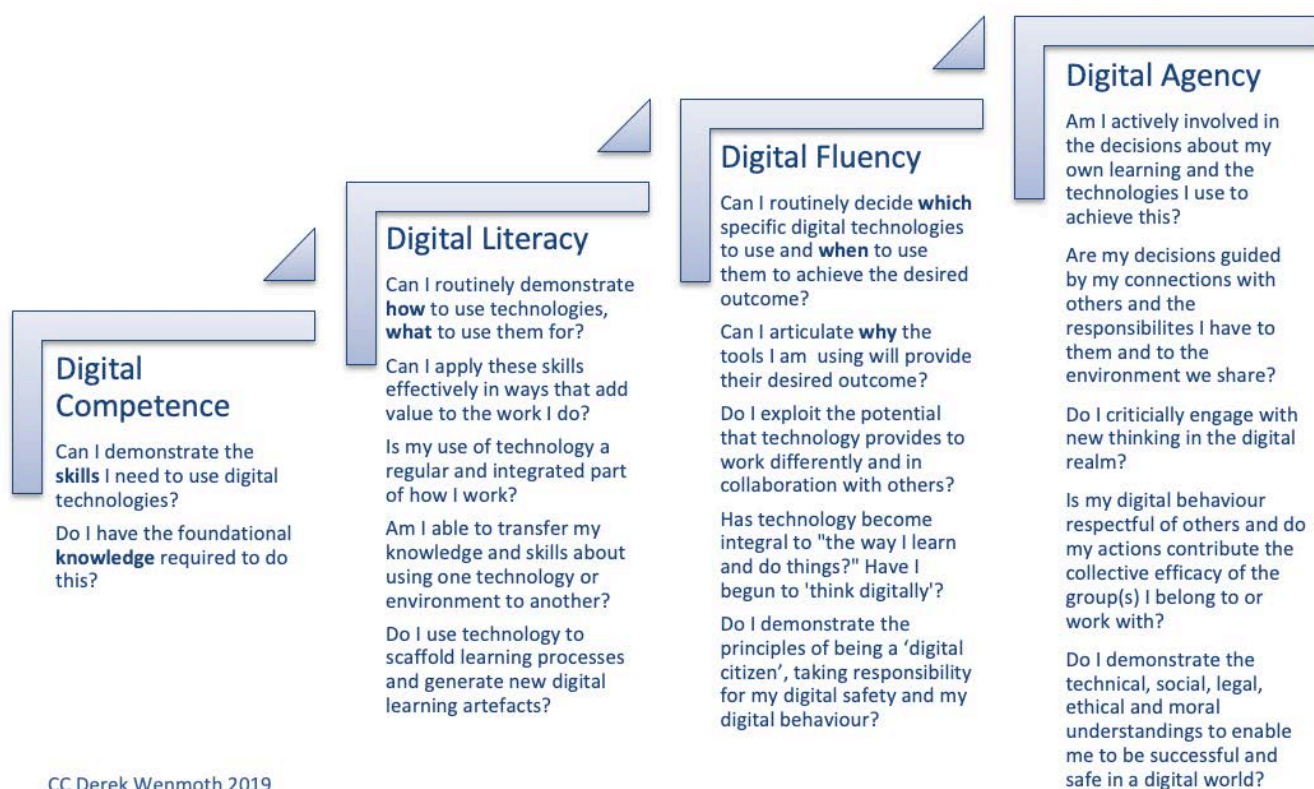
Thus if our approach to teaching and learning is to achieve the goal of developing agentic learners we can no longer rely on learning by routine. To prepare our learners (and teachers) for the world we now face we must focus on creating experiences that excite imaginations, encourage creativity, promote self-management and foster leadership – all characteristics of agency.

4.   Why digital agency?

Digital technologies have been present in our education system for at least the past 30 years, and in that time we have seen the sophistication of the technology evolve and so too the level and sophistication of skill and knowledge required to engage with the technology in ways that are productive and empowering.

When computers were first introduced into classrooms there was a great deal of time devoted to learning 'about' the technology and the *digital skills* required to use it effectively. Over time the notion of appropriate and responsible use became important, and the term *digital literacy* was introduced. A digitally literate person may be defined as someone knows **how** to use digital technologies and **wha**t to do with them.

More recently, the impact of digital technologies on learning and on society have become more integral and more complex, and the term *digital fluency* was coined, A digitally fluent person can decide **which** specific digital technologies to use and **when** to use them to achieve their desired outcome, and they can articulate **why** the tools they are using will help them achieve this.

Digital Competence

Can I demonstrate the **skills** I need to use digital technologies?

Do I have the foundational **knowledge** required to do this?

Digital Literacy

Can I routinely demonstrate **how** to use technologies, **what** to use them for?

Can I apply these skills effectively in ways that add value to the work I do?

Is my use of technology a regular and integrated part of how I work?

Am I able to transfer my knowledge and skills about using one technology or environment to another?

Do I use technology to scaffold learning processes and generate new digital learning artefacts?

Digital Fluency

Can I routinely decide **which** specific digital technologies to use and **when** to use them to achieve the desired outcome?

Can I articulate **why** the tools I am using will provide their desired outcome?

Do I exploit the potential that technology provides to work differently and in collaboration with others?

Has technology become integral to "the way I learn and do things?" Have I begun to 'think digitally'?

Do I demonstrate the principles of being a 'digital citizen', taking responsibility for my digital safety and my digital behaviour?

Digital Agency

Am I actively involved in the decisions about my own learning and the technologies I use to achieve this?

Are my decisions guided by my connections with others and the responsibilites I have to them and to the environment we share?

Do I criticially engage with new thinking in the digital realm?

Is my digital behaviour respectful of others and do my actions contribute the collective efficacy of the group(s) I belong to or work with?

Do I demonstrate the technical, social, legal, ethical and moral understandings to enable me to be successful and safe in a digital world?

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The illustration above illustrates this development. While providing a helpful way of understanding the increasingly sophisticated level of skill and knowledge required to work with these technologies and what they enable the user to do, it is still possible, however, for this sort of activity to be undertaken in a 'traditional' model classroom model where the user is completing tasks set by others, with limited ability to act on choices etc. In other words, to do so without any real agency.

This paper introduces the notion of *digital agency* as a term that embraces much of what has been spoken and written about to date, but places a greater emphasis on the learner being the driver of what happens, as one who has genuine choice about the options open to them, and possesses the skills, knowledge, dispositions and capabilities to act on those choices and work effectively and sustainably in a digital environment.

The progression from proficiency to fluency highlights the emphasis on developing a set of skills, knowledge and capabilities to participate fully in the digital world – with an increasing level of understanding and responsibility incorporated as you move to the right. The shift then to digital agency recognises that they are better equipped to take responsibility for their own actions, for their interactions with and impact on others, and the impact they have on the environment that supports and sustains them.

The increasing use of digital technologies inside and outside of school provides clear evidence of the affordances digital technologies provide to tailor learning experiences to individual learners, to respond to learner-driven choices about where, what and how learning occurs, and the capacity they provide for learners to manage the evidence to support and to demonstrate their achievement as learners.

While the principles of 'learner-centredness' have been espoused in educational literature for many decades, much of the system response to this has been to work at differentiating the way education is delivered, rather than embracing the notion of learners with agency over their learning, and the system existing to serve the needs / interests of the learner. Thus, digital agency implies more than simply learning the skills, knowledge and social mores associated with using technologies appropriately and responsibly. Having agency as a learner must be a default expectation now as young people become increasing adept at using a variety of technology-enabled means to access, participate in and even contribute to the learning that meets their needs.

Many of the characteristics of Digital Agency are reflected in the work of NetSafe who, in consultation with New Zealand teachers, has produced the following definition of a New Zealand digital citizen. A digital citizen;

- is a confident and capable user of ICT,
- uses technologies to participate in educational, cultural, and economic activities,
- uses and develops critical thinking skills in cyberspace',
- is literate in the language, symbols, and texts of digital technologies,
- is aware of ICT challenges and can manage them effectively,
- uses ICT to relate to others in positive, meaningful ways,
- demonstrates honesty and integrity and ethical behaviour in their use of ICT,
- respects the concepts of privacy and freedom of speech in a digital world,
- contributes and actively promotes the values of digital citizenship.

Digital agency involves all of the above characteristics within a digitally rich and enabled environment. It ensures people can participate in life-enhancing opportunities (social, economic, cultural, civil) and achieve their goals in ways that make an important difference. It involves thinking and working with a 'digital first' mindset, and includes the capability of effectively and ethically accessing and interpreting information; discovering meaning and constructing knowledge; designing, developing and curating content, and communicating ideas.

5. Conclusion

There is significantly more to digital than just another set of skills and knowledge to develop. It requires a fundamental change in the way one participates in and contributes to a digitally enabled society, recognising in the process that society itself is changing as a result of the impact of digital technologies.

The education system is not exempt. Digital technologies are fundamentally changing the learning lives of everyone in the system – teachers, parents and students. Demonstrating digital agency implies not just learning *about* or even *with* digital technologies, but is being able to participate fully in a digitally enabled education system – for both learners and teachers.

Digital agency is an essential capability for living and life-long learning, and requires a critical awareness of being part of something bigger than one's self, and of the need to temper one's individual use (or misuse) of digital technologies with the responsibilities that emerge from understanding the impact of our own behaviours on others and on the environment. It requires a sense of 'citizenship', and the rights and responsibilities associated with that.

In designing for the future state we will need to create the conditions where learning and learners (including teachers) can thrive, and where the emphasis is on promoting the capabilities of all involved as agentic learners, contributing to the collective efficacy. The new approaches must recognise the dynamic and changing nature of knowledge, and the diverse 'ways of knowing' and resources required to support this. Rather than delivering content from repositories that have been pre-selected, quality assured and meta-tagged by 'experts', the new digital environments must be more collaborative, participatory and contributory, where the design, development and curation of the content itself is a part of the knowledge building process. We simply can't continue to 'front load' learners with things they may need to know in the future.

6. Digital Agency Checklist

Use the following table to consider the extent to which there is a 'shift in ownership' of learning in your context, and use the blank column to identify specific areas to focus on.

	Agentic Practice	Next Steps
What is the *purpose*?	All learning activity is focused on meeting the identified needs of the individual, preparing them as capable, confident, self-directed learners. Learner voice is used to inform those needs. Emphasis on development of competencies.	
What is learned?	Learners participate in all decisions about learning content (themes, topics etc.) Learning focus is authentic to the learners' context and experience. Emphasis on depth over breadth.	
How is it learned?	Emphasis on learning as activity, where learners have choice about the way they approach learning tasks, and are supported in this by Universal Design for Learning principles. They have a sense of ownership of and take responsibility for learning.	
Who with?	Learners may choose to work alone or in collaboration with others – including peers, teacher etc. Learners are aware that every decision and action she or he takes, will impact on the thinking, behaviour or decisions of others – and vice versa.	
Where?	Learning occurs in a range of settings that the learner is free to choose between, and which are appropriate to the learning activity. Learners are growing, working, and participating in their communities. This includes settings outside of school, including online.	
Feedback & Support?	Learners identify where support is required and seek support/feedback from the best person to guide them. Learners recognise other students' learning and supports this through effective personalised feedback/forward, questioning.	
Progressions?	Learning progressions are known to learners, and they can use data to determine next steps in their learning. Learners are proficient in using a range of strategies for solving personal learning challenges in order to achieve the next steps in learning.	
Success criteria?	Learners are capable of constructing or co-constructing their own success criteria, with the support of peers or teacher as required. Focus is on learners' ability to succeed, with levels of performance (success) recorded in rubrics.	
Monitoring progress?	Self-assessment and monitoring is embedded throughout the learning process. Learners use a variety of tools and frameworks (e.g. portfolios, rubrics) to accurately identify and record their own progress and achievement.	

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