CELEBRATING 25 YEARS

University of South Australia

What are digital literacies in Higher Education?

Language and Literacies team
Teaching Innovation Unit

37%
won’t teach their children to
read analogue time

Phones are getting smarter and people are getting dumber … telling time is common knowledge!

People need to learn to survive in the real world.

Should we abandon analogue clocks simply because some people can't manage them?

How many of you can read a sundial …?

Learning for an unknown future

Learning has to cope with two forms of uncertainty…

information overload, from a multiplication of different and incompatible stakeholders, perspectives, performance indicators, evidence and knowledge…

[and] a personal sense that the world is radically unknowable and we can never hope to describe it, *let alone* act with assuredness in it.

Ronald Barnett 2004

Likely trends

Digital

- exponential growth in computing power
- more technology, and more information
- increased connectivity and intelligence
- more online and blended learning

Social

- ageing, and greater generational diversity in work and life
- global mobility, and increasing cultural and linguistic diversity

Likely trends

Work

- globalised, market-driven, offshoring, transnational links
- automation of existing jobs and emergence of new ones
- participatory, collaborative, multi-centred (less hierarchical)

Personal or ontological

- increasing complexity, and constant and rapid change
- distractions everywhere, competing for our attention
- uncertainty

So what does this mean for education?

digital natives

divide

disruption

age

learning

revolution

literacies

digital
multi
media
emotional
information
professional
academic literacies

Something more?

How will people come to thrive in a

digital

connected

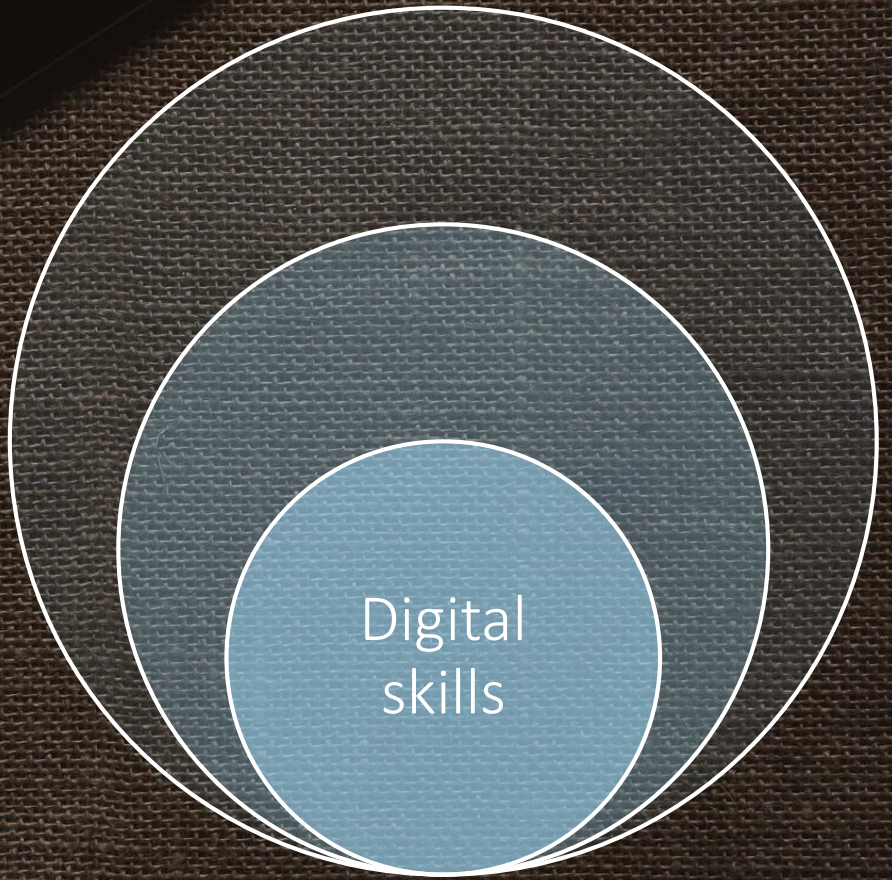
socially diverse and complex

information-saturated

changing and uncertain

future?

Knowing



Not all students are ‘digital natives’…

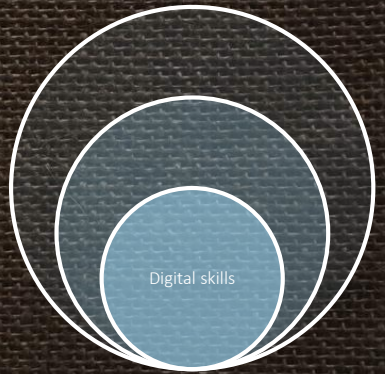
- Disparity in students’ digital skills
- Inequalities and marginalisation around digital access
- Competency in social networking tools does not prepare students for academic study in a digital environment
- Many students cannot effectively employ technology to enhance learning

Digital tools for learning

What kinds of tools and skills do students need to be successful at university?

New tools, platforms, mobility and flexibility

- Ethics
- Privacy
- Security
- Netiquette



Digital tools for professional practice

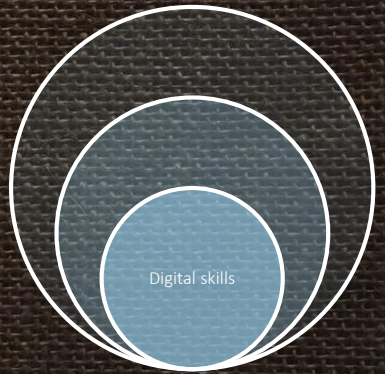
- Each tool has affordances and constraints
- Different contexts use different tools
- Each discipline and profession requires certain kinds of tools (nurses, engineers, teachers, etc.)
- Students need to develop knowledge of these tools and the ability to use them

Hafner & Rodney 2012

Digital tools in teaching

- Potential to use digital tools to undertake old tasks more efficiently
- Tools alone cannot enhance student learning outcomes
- New pedagogies are needed
- Alignment and integration of the teaching, learning and digital tools are a requisite for productive outcomes.

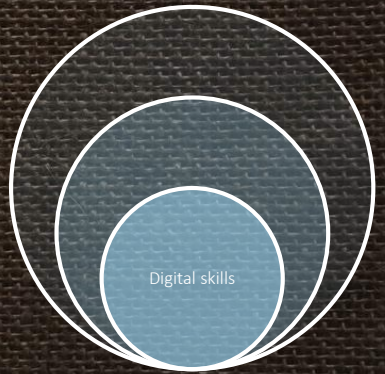
Cowie & Khoo 2014



Implications for teaching and learning

ability to adapt the affordances and constraints of [digital tools] to particular circumstances

Jones & Hafner, in Pangrazio 2013

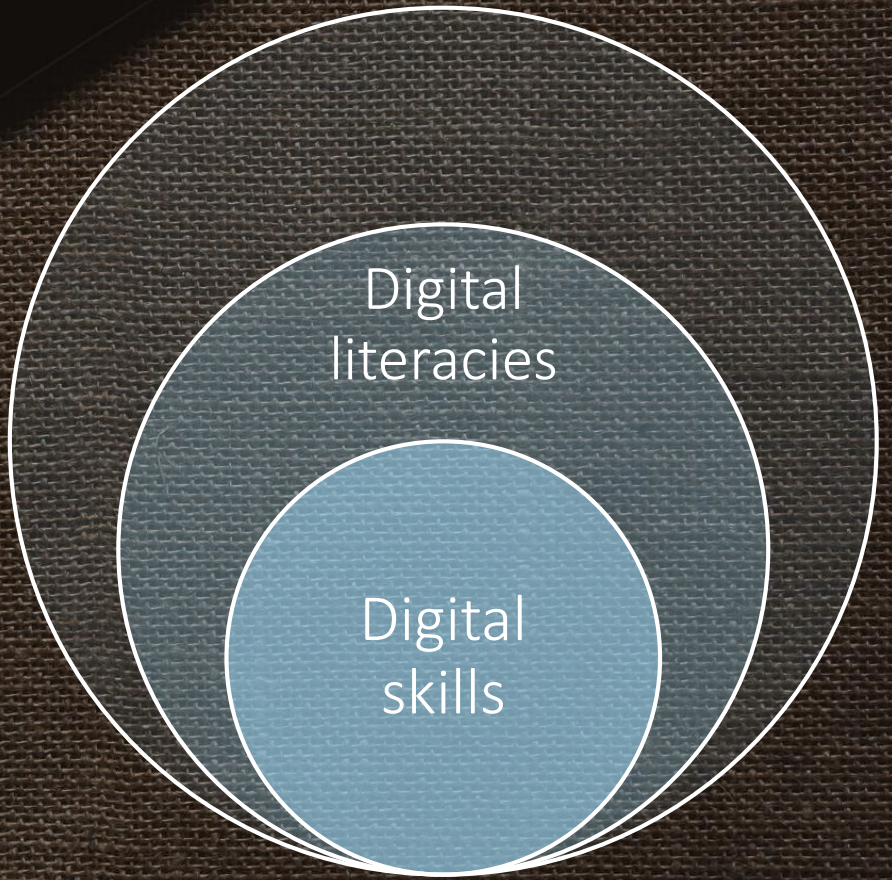


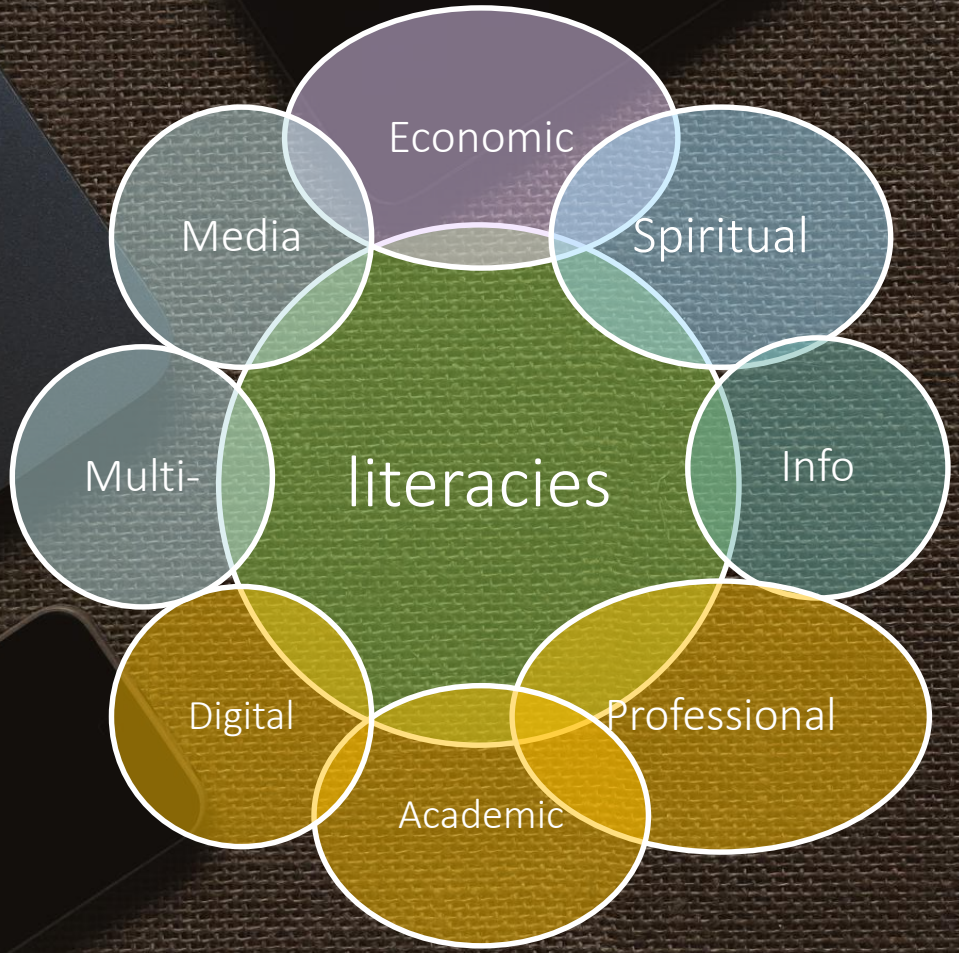
Where do my students have opportunities to develop…

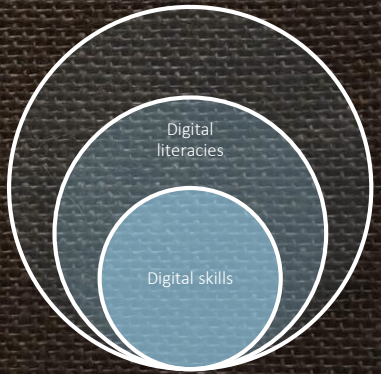
- motivation to explore different tools,
- experience in activating and applying tools in practice,
- competence in selecting the best tool for a purpose, context, and audience?

Doing

Knowing

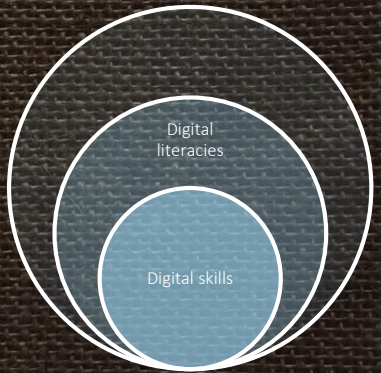



Economic
Media
Spiritual
Multi-
literacies
Info
Digital
Professional
Academic


Digital literacies
Digital skills

Literacy is the "ability to identify, understand, interpret, create, communicate, compute and use printed and written materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge and potential, and to participate fully in their community and wider society" (UNESCO 2010).

Is this definition still useful in a digital world?



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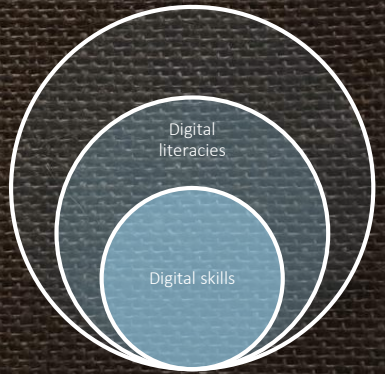
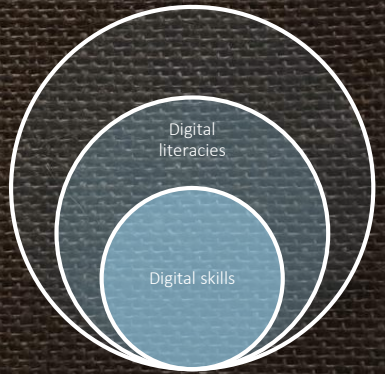


Criticality

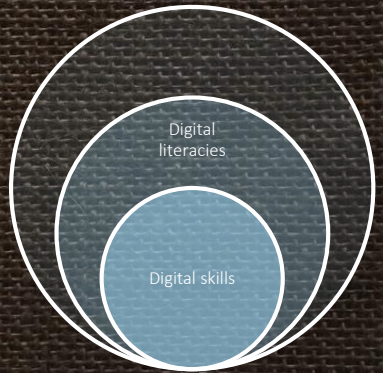
- Critical thinking over technical competence
- Knowledge assembly: how to assimilate the information, evaluate it, and reintegrate it
- Becoming part of a discourse community - with criticality

Gilster 1997



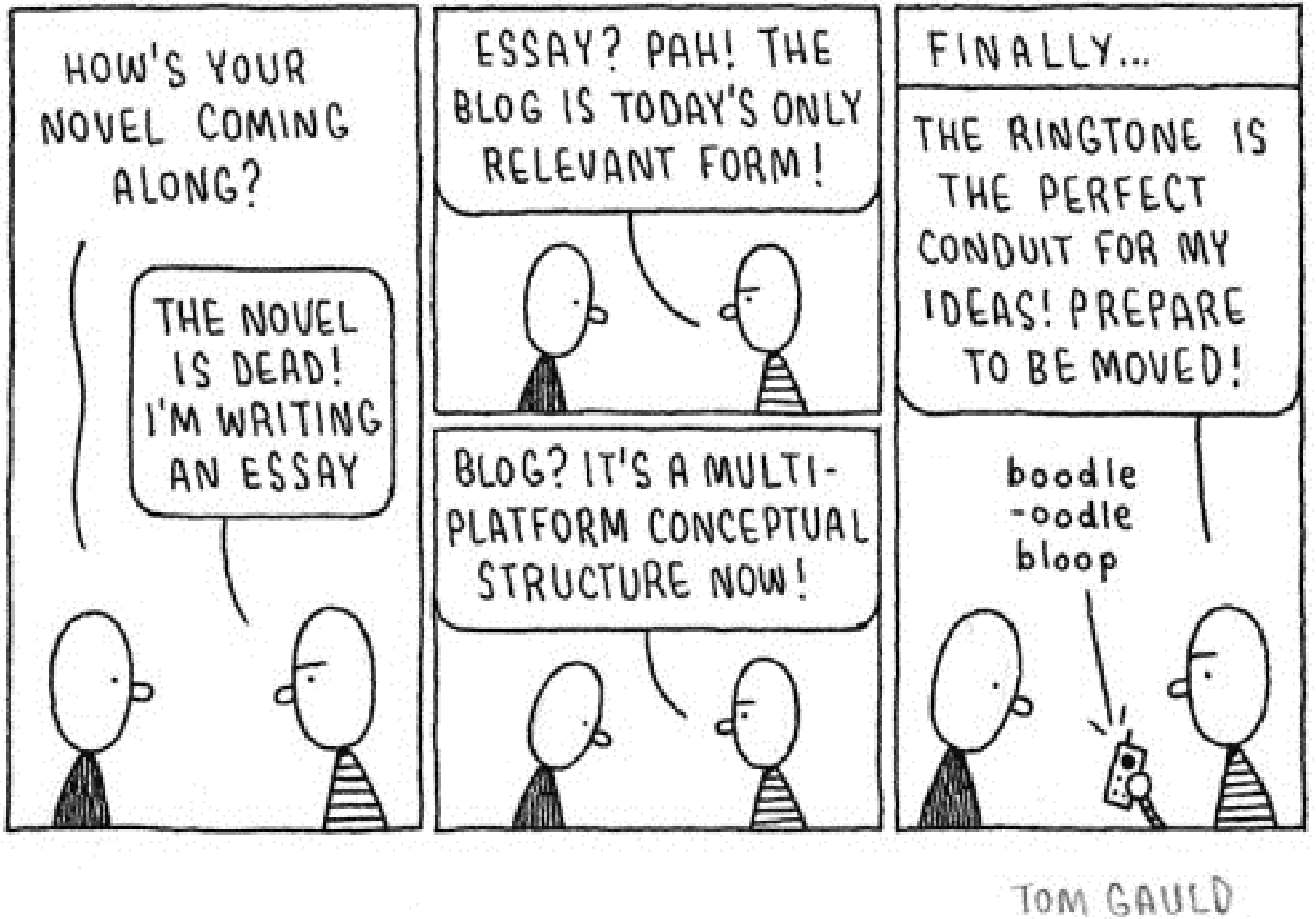
Students need to:

- Read visuals and work with graphic user interfaces (eg diagrams and infographics)
- Collaborate and share online
- Find and evaluate information quickly and filter out bias & irrelevancy
- Exert power over technologies from within



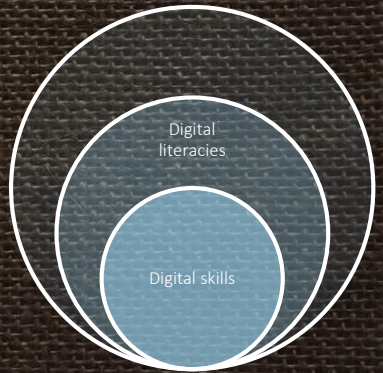
Pangrazio 2016

BU


HOW'S YOUR NOVEL COMING ALONG?
THE NOVEL IS DEAD! I'M WRITING AN ESSAY
ESSAY? PAH! THE BLOG IS TODAY'S ONLY RELEVANT FORM!
BLOG? IT'S A MULTI-PLATFORM CONCEPTUAL STRUCTURE NOW!
FINALLY...
THE RINGTONE IS THE PERFECT CONDUIT FOR MY IDEAS! PREPARE TO BE MOVED!
boodle -oodle bloop
TOM GAULD

How can we assist students to:

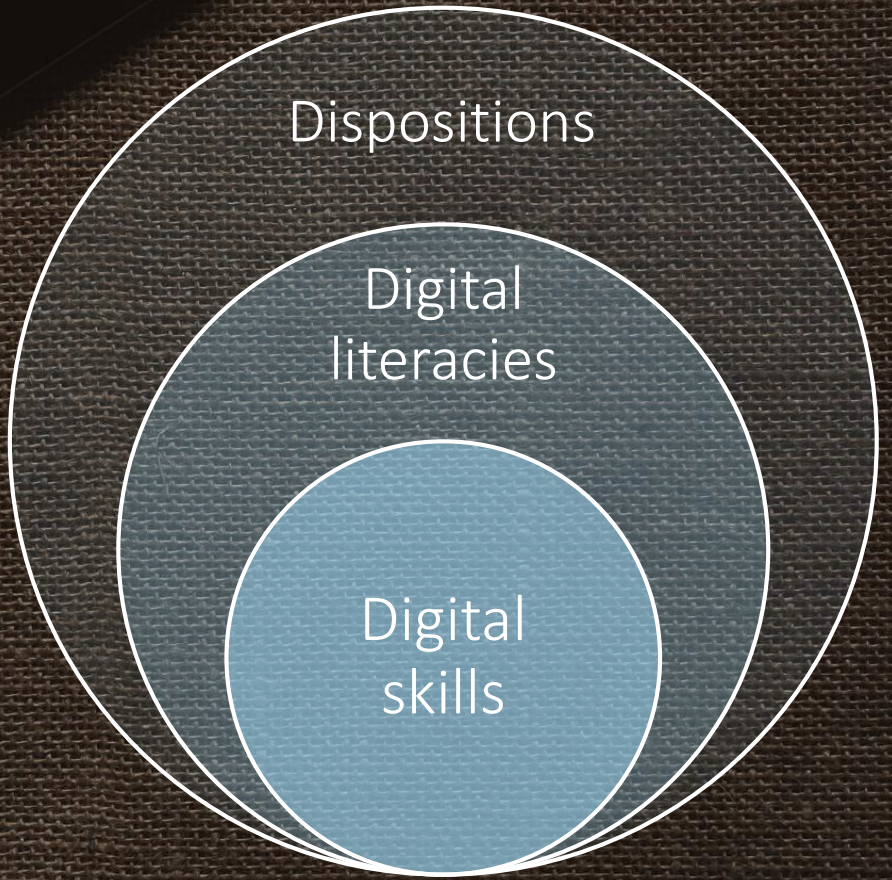
- navigate through the complexity?
- pull together a range of texts and attend to academic integrity?
- retain criticality when answers are so easily found?
- develop critical, analytical skills which often require maturity/experience?



Being

Doing

Knowing

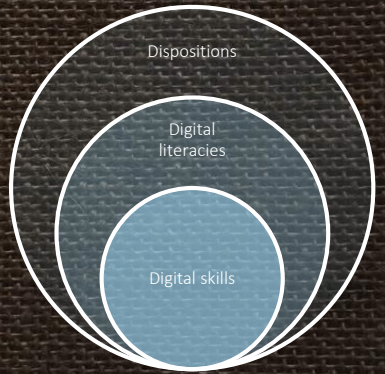


The student will need a certain kind of disposition [and awareness]

“Learning for an unknown future has to be a learning understood neither in terms of knowledge or skills but of human qualities and dispositions.”

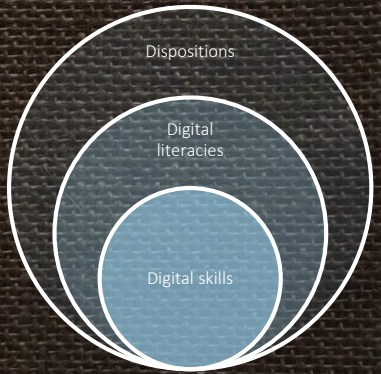
To be ‘work ready plus.’

Gardner 2007; Barnett 2012; Scott, 2015



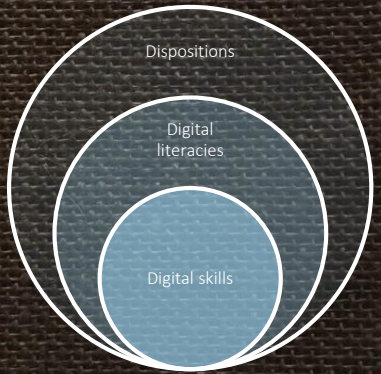
Adaptability, flexibility, self reliance

Barnett, 2004, 2012; CSIRO, 2010; Gardner, 2007; Lombardi, 2007; MCEECDYA, 2010; Scott, 2015



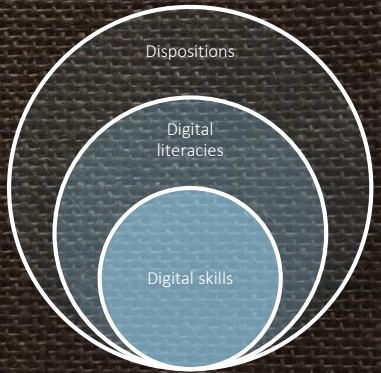
Patience, carefulness and thoughtfulness

Barnett, 2004, 2012; Gardner, 2007; Pangrazio, 2016; Scott, 2015; Siemens, 2005



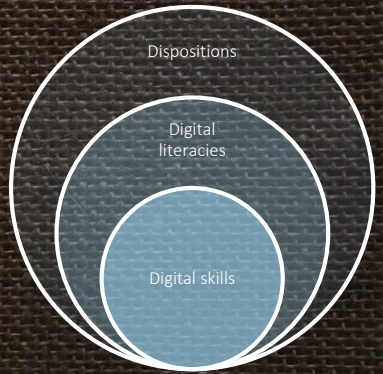
Resilience and buoyancy

Gardner, 2007; MCEECDYA, 2010; Scott, 2015



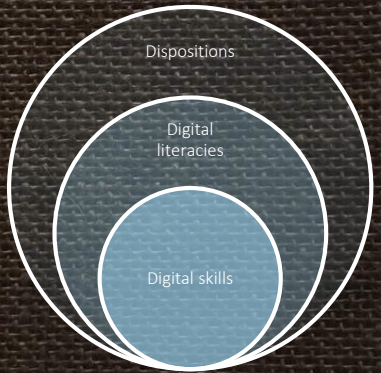
Initiative and entrepreneurialism

CSIRO, Gardner, 2007; MCEECDYA, 2010; Scott, 2015



Limit distractions

Gardner, 2007; Spann, 2016

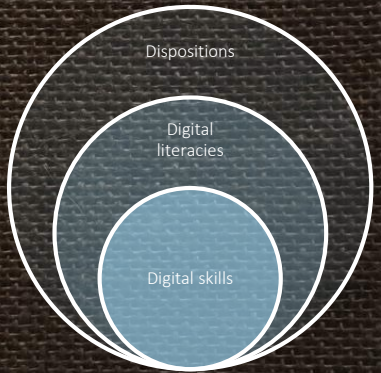


"Reading [learning] without reflecting is like eating without digesting"

– Edmund Burke

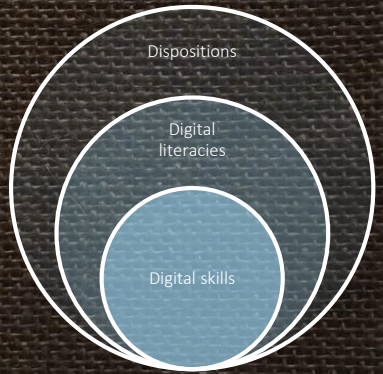
Critical self-reflection

Barnett, 2004; Gardner, 2007; Lombardi, 2007; Pangrazio, 2016



Mindful and productive disposition

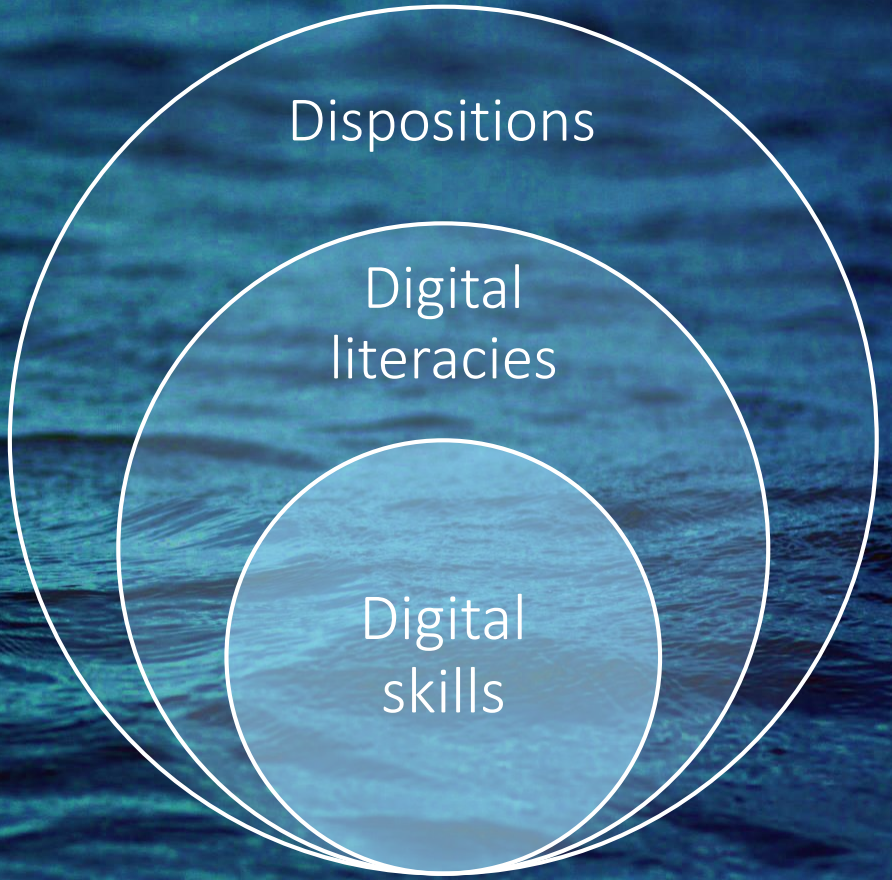
Barnett, 2004, 2012; Kilpatrick et al. 2006; Spann, 2016



Being

Doing

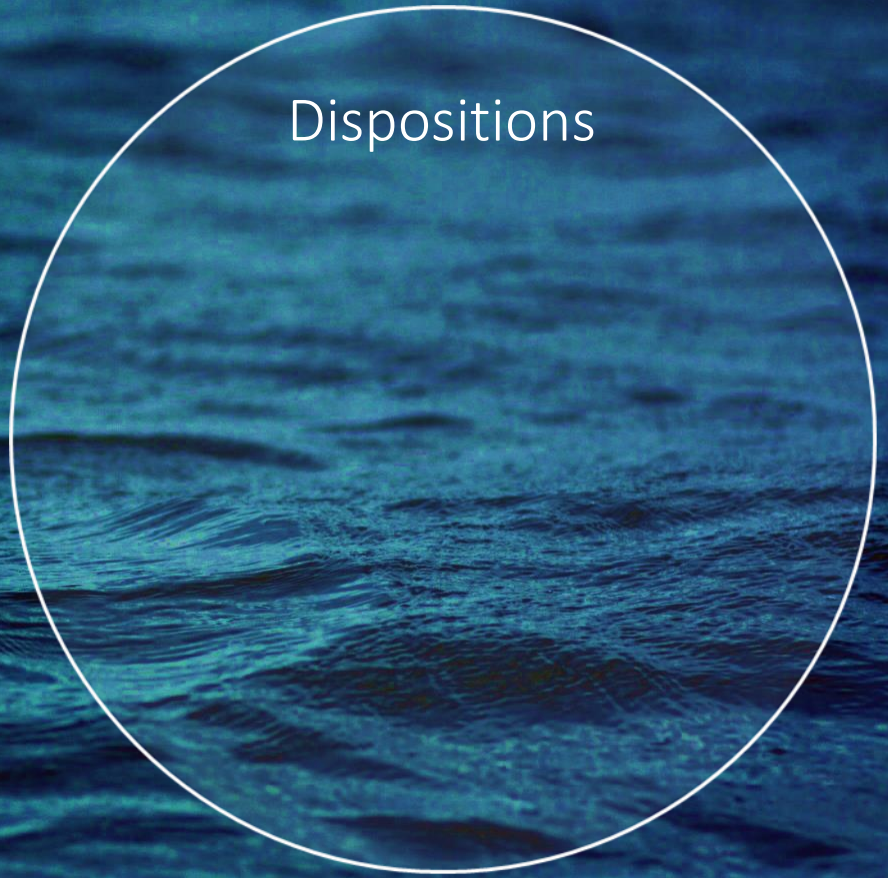
Knowing



Knowing *about* and knowing *how to use* digital technologies for learning and for work

Ability to employ and leverage digital tools *meaningfully* and *purposefully*

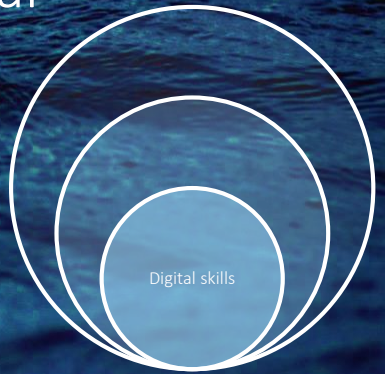
Practice of attitudes and behaviours that promote mindful and productive ways of being



A curriculum for digital skills?

Focus on addressing digital marginalisation, and professional readiness

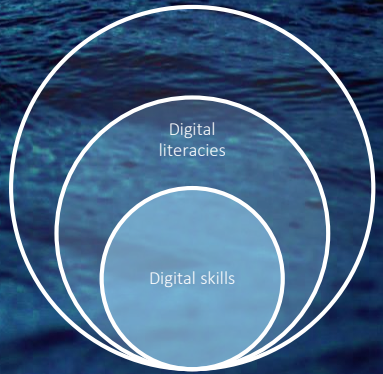
- Strategies (curricular and co-curricular) for ensuring all students can engage with the digital learning environment
- Curriculum within all programs dedicated to digital tools central to the discipline or profession
- Opportunities in all programs to experiment with and evaluate relevant digital tools



A curriculum for digital literacies?

Focus on *making sense* and *making meaning* in a discipline

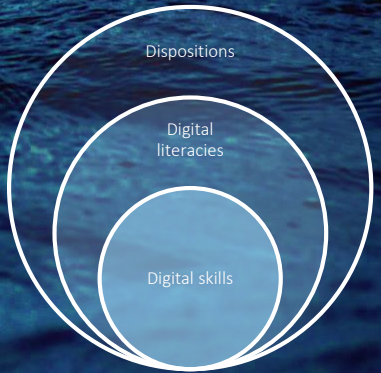
- navigate a complex and unfiltered information landscape
- identify and engage with ideas of relevance, authenticity and reliability
- interpret their meaning, and understand their significance and value
- integrate and synthesise material with both criticality and integrity



A curriculum for dispositions?

Focus on authentic ‘real world’ tasks – wicked problems

- Scaffolded opportunities to explore and experience complexity, frustration, conflict, change, uncertainty
- Tackled individually, with peers, virtually and face-to-face
- Incorporating reflection to encourage practices of self-awareness, adaptability, resilience, patience etc.



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25

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