

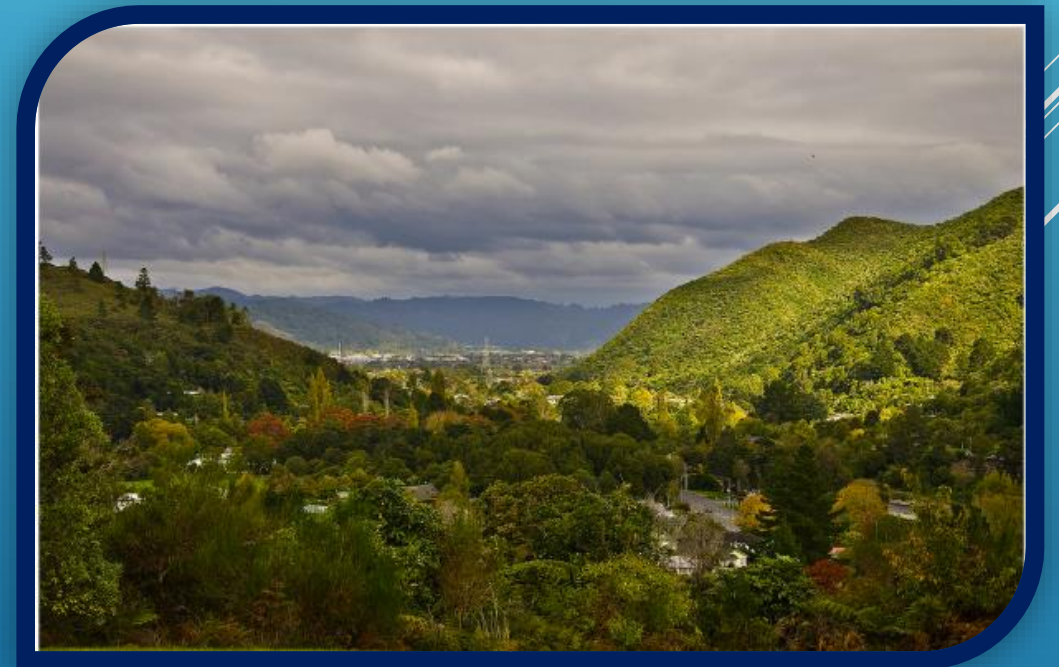
DIGITAL LITERACY AND GENERATION Z THE UNPACKING OF EXPECTATIONS

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- ▶ Welcome
- ▶ My spiritual home is a place in New Zealand called Akatarawa. It is framed by the Taraua ranges and the Akatarawa river runs through the ranges.
 - ▶ When our family home was sold this year – 5 generations of our family had lived there
- ▶ My first ancestor arrived in New Zealand with the Merchant Navy.
- ▶ I identify as Pakeha
- ▶ I currently live in Palmerston North,
 - ▶ Manawatu Region, in the North Island
- ▶ My family name is Tyacke
- ▶ My name is Vicki-Lee
- ▶ Welcome, welcome, welcome



PERSONAL INTRODUCTION

(Bernzfotos, n.d.)

- ▶ Employed in the tertiary sector in New Zealand
- ▶ PhD Student
 - ▶ Curtin University School of Education
- ▶ The digital literacy of New Zealand secondary school students and their level of digital preparedness for tertiary studies.
- ▶ An exploratory case-study research design
 - ▶ Mixed methods: Surveys, online learning packages, focus groups
- ▶ Develop an understanding of the meaning of digital literacy for Year 13 Biology students
- ▶ Data has been collected from New Zealand secondary schools, and tertiary institutions in New Zealand
- ▶ Focus: The participants' knowledge of digital literacy and the interplay between the secondary and tertiary sectors in New Zealand.

BACKGROUND

- ▶ Western Cultural Construct
 - ▶ Age cohort – approx. 1997 to 2015
- ▶ A connected generation – internet, sophisticated digital devices, each other
- ▶ Digital devices – “run as an appendage or extension of their very identity” (Gabel, 2017, ¶7)
- ▶ Technology centric lifestyle
- ▶ Omnipresent personal digital device



GEN Z

- ▶ All generations are impacted by technological advancements
- ▶ Baby boomers – wireless radio
- ▶ Gen X – television age
- ▶ Gen Y – personal computers
- ▶ Gen Z – no pre-internet reference point

(McCrindle Research, 2012)

- ▶ Each generation has its own distinct characteristics for how they embrace and use the developing technologies

GENERATIONAL DEFINING POINTS

- ▶ Rate of digital integration – largest generation gap in our history (Leibler,2018)
- ▶ Significant differences created by lifestyle and/or period effects
- ▶ Rapid change in cultural norms – impacts collective lifestyles
- ▶ Popular media – navigating the challenges between parents and children (Fyers & Walters, 2017; Pearson, 2017)

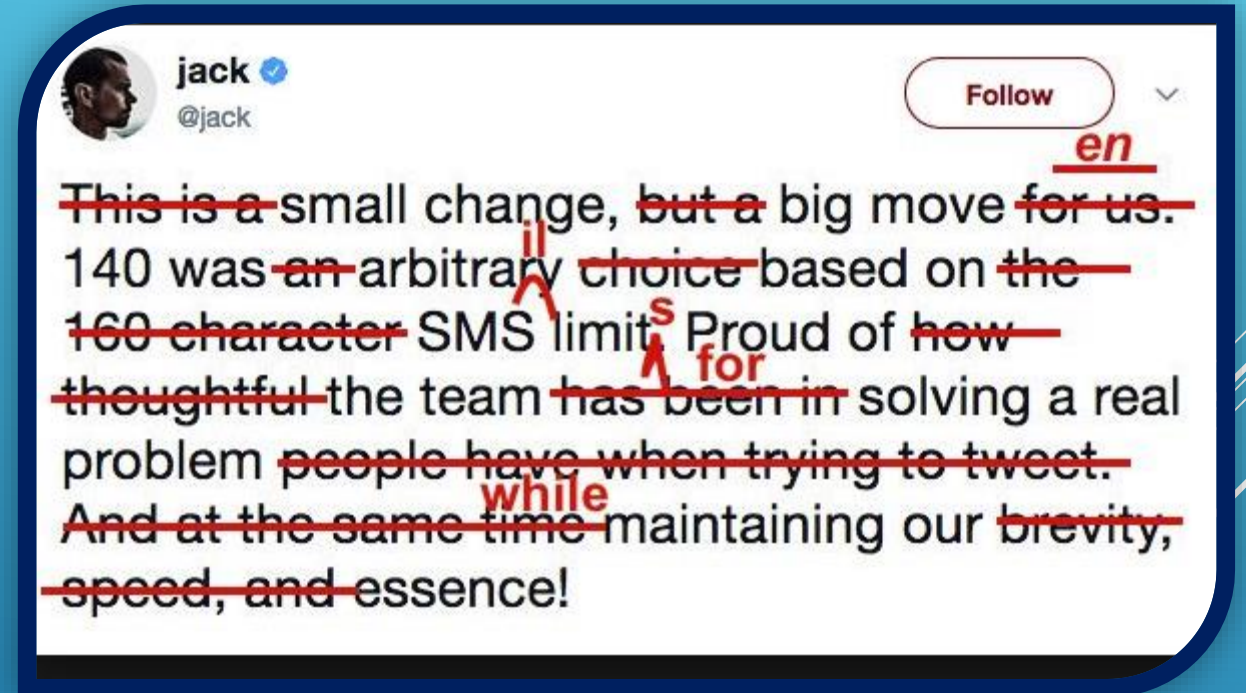
CULTURAL PARADIGMS – GENERATION GAP

- ▶ Digital Natives
- ▶ Immersed in digital culture – no reality outside of the internet

(Prensky, 2001)

- ▶ Digital integrators – integrated technology seamlessly
- ▶ Permeates all aspects of their being
- ▶ Instruction guides are not required – intuitive process
- ▶ Communication – post literate community and brevity is essential

(McCrindle Research 2018)



(Knight, 2017)

DIGITAL INTEGRATION

- ▶ Technologically savvy digital natives
- ▶ Contextually based
- ▶ Digital (technical) proficiency
 - ▶ transferable skills, adds value
- ▶ Digital proficiency is being able to understand, select and use technologies and technological systems (Wenmoth, 2015)

DIGITAL PROFICIENCY



- ▶ The cognitive or intellectual competencies, which include being able to read, create, evaluate and make judgements while applying digital proficiency (Wenmoth, 2015)
- ▶ The broader capacity to participate in a society that uses digital communication technology in workplaces, government, education, cultural domain, civicspaces, home and leisure spheres (Hoechsmann & DeWaard, 2015, p.4)
- ▶ Linking of digital capacities to offline outcomes
- ▶ 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, 2004)

[DIGITAL] LITERACY

Conceptual Understanding

Digital Literacy

Can I apply these skills effectively in ways that demonstrate understanding of what it means to 'be digital' and to 'think digital'

Understanding

Application

(Wenmoth, 2015)

- ▶ Used interchangeably with ICT Fluency, Digital Literacies, Digital Competence, Digital Citizenship
- ▶ High level of engagement that is achieved when individuals are comfortable in using digital knowledge and digital skills.
- ▶ The ability to reformulate knowledge and produce information to express oneself creatively and appropriately in a digital environment (Myers & Sundaram, 2013, p.409)
- ▶ Being able to apply digital technologies to fulfil a certain purpose without difficulty
- ▶ The link between digital engagement and offline outcomes (Park, 2017)

[DIGITAL] FLUENCY

Procedural Fluency

Digital Fluency

Am I a 'digital citizen'?
Is my digital behavior respectful of others and do I demonstrate the technical and social skills to enable me to be successful and safe in a digital world?

Wisdom

Analysis, evaluation

(Wenmoth, 2015)

Popular Media

- ▶ FE News UK: Untethered, Collaborative & Empowered. Designing learning experiences for Generation Z (Smith, 2018)
- ▶ Generation Z is starting university – but is higher education ready (Povah & Vaukins, 2017)

Scholarly Media

- ▶ Engaging Gen Z (Cook, 2015)
- ▶ Net generation or Digital Natives: Is there a distinct new generation entering university (Jones, Ramanau, Cross & Healing, 2010)

- ▶ Continuous revision and evolution of pedagogy
- ▶ Significant change in the landscape for Gen Z
- ▶ Is a new approach to educational theories required?

DIGITAL EXPECTATIONS

- ▶ Homogenous perspective
- ▶ Learner assumptions based on generational membership

- ▶ Generational differences are myths being purported by researchers and popular media
- ▶ Wide range of evidence explaining generational differences without critical analysis of how these differences have occurred

(Costanza & Finkelstein, 2015)

- ▶ Gen Z's connectedness is visible and we tend to categorise the digital abilities of Gen Z based on what we see
- ▶ Gen Z live in a hyperlinked world as confident users of digital technologies, digital integrators and technologically literate

(Wilhelm & Tedmon, 2018).

LEARNER PROFILING

- ▶ Throughout history there have been many “tools” to support literacy development

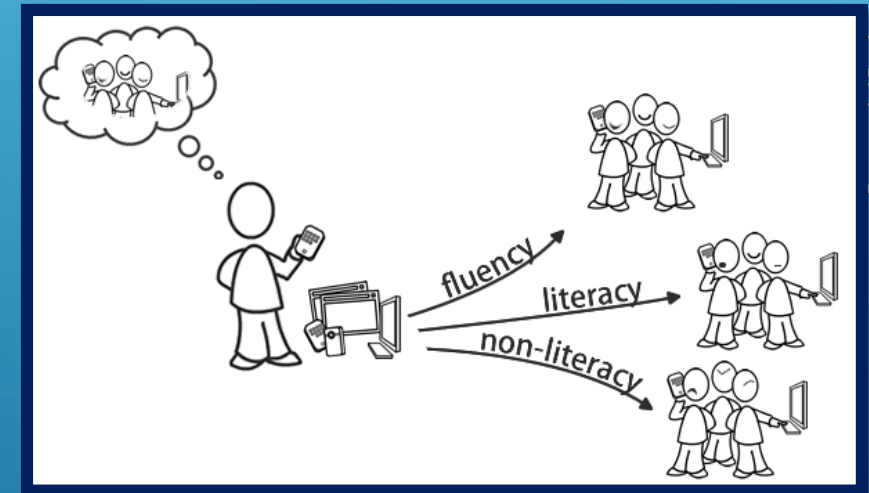
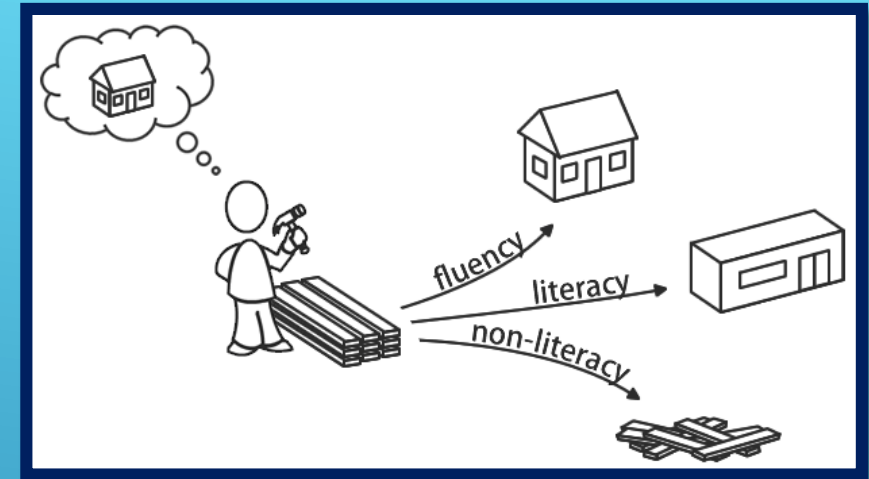
- ▶ Egyptian Hieroglyphs – Hieroglyphs Literacy?
- ▶ Scrolls – Scroll literacy?

- ▶ Subskills

- ▶ Phonological awareness, phonics, comprehension, fluency and vocabulary
- ▶ Digital proficiency

- ▶ New Zealand Context

- ▶ Literacy levels of New Zealanders is of significant concern
- ▶ Longstanding Socio economic gap (Education Central, 2017)
- ▶ 2017 - 40% of New Zealand adults have functional literacy concerns (RadioNZ, 2018).
- ▶ 2008 – 40% of the New Zealand working population were below the minimum level required (NZ Herald, 2008)



(Briggs & Makice, 2012)

THE CONCERN IS...

"Students today can't prepare Bark to calculat
their p... The...
wh...
wh...
wh...

"Students today depend
upon paper too much

"Students o
on ink. The
to use a pe
a pencil. P

1988 – Apple Classroom-

▶ "Computers give stud
advantage. Therefore
used computers to ar
create displays will be
from the science fair.

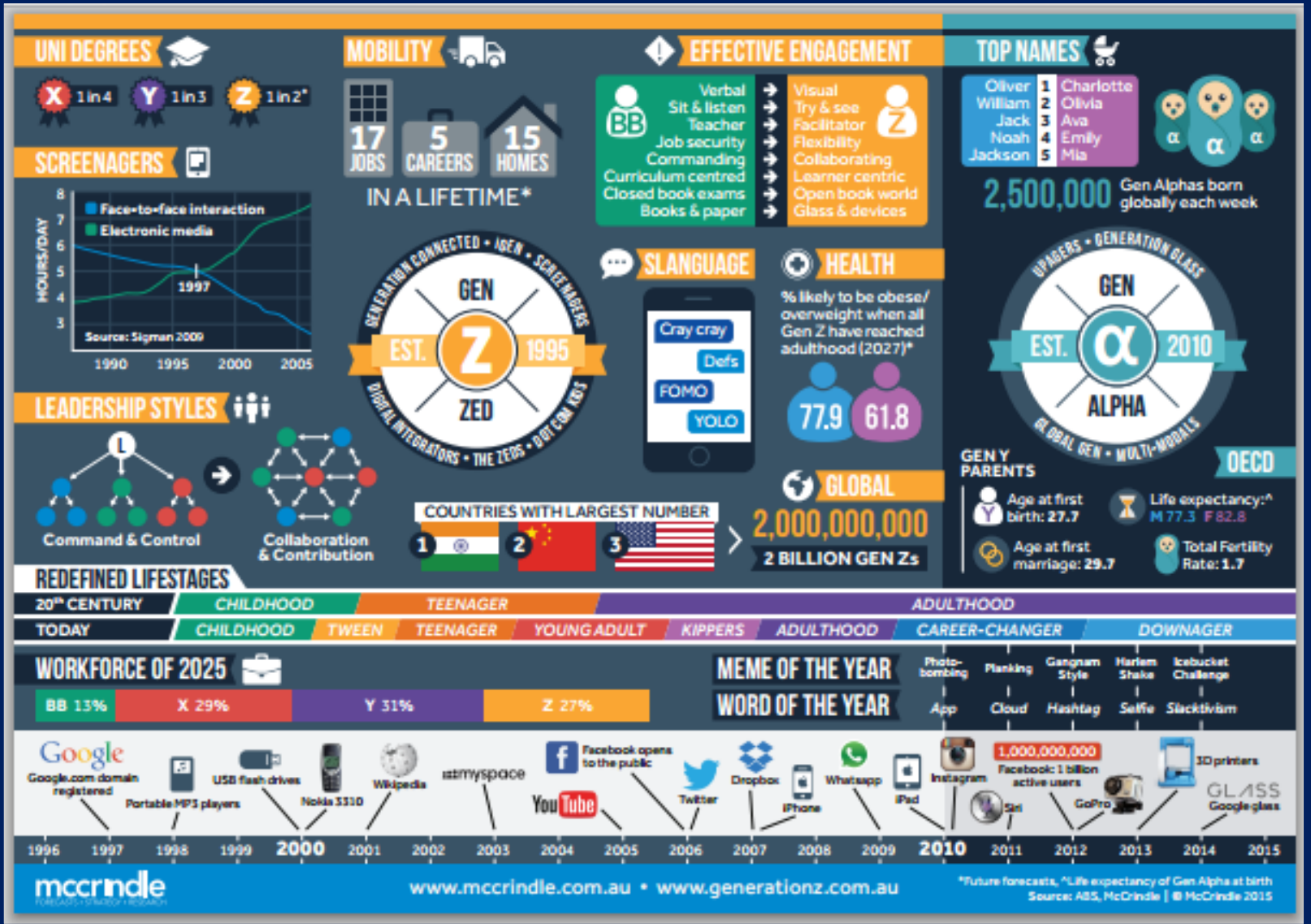


(Trending Education, 2017)

HISTORY ALWAYS REPEATS ITSELF.....

- ▶ Rapid integration of digital technologies in education has changed the education landscape
- ▶ Gen Z are digital integrators and all other digital users, including Gen Y are digital migrators (Prensky, 2001)
- ▶ Non-digital natives are teaching digital natives, educators are using a pre-digital language to educate a digital speakers (Cornu, 2011).
- ▶ Language differences between educator and learner is not a new phenomenon
- ▶ Educators and Learners bring to education their cultural capital and their understanding of digital technologies and their level of digital literacy
- ▶ Literacy is multifaceted and a longstanding concern
- ▶ The unpacking of the expectations is complex and the interplay of their life cycle, period and the cohort effects will continue to contribute to the complexities.

CONCLUSIONS



Contact Information

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QUESTIONS?

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