

Inspire Greatness Conference

Digital Literacy in a Global Context

Dr Phil Lambert PSM

phillambertconsulting@gmail.com

 **@DrPhilLambert**

 **Dr Phil Lambert PSM**

 **Phil Lambert Consulting**



GERARD
BUTLER

JIM
STURGESS

ABBIE
CORNISH

WITH

ED
HARRIS

AND

ANDY
GARCIA

GEOSTORM

SEE IT IN 3D

Everyone was warned but no-one listened.

The rise in temperatures; ocean patterns changed and ice caps melted.

They called it extreme weather. They didn't know what extreme was.

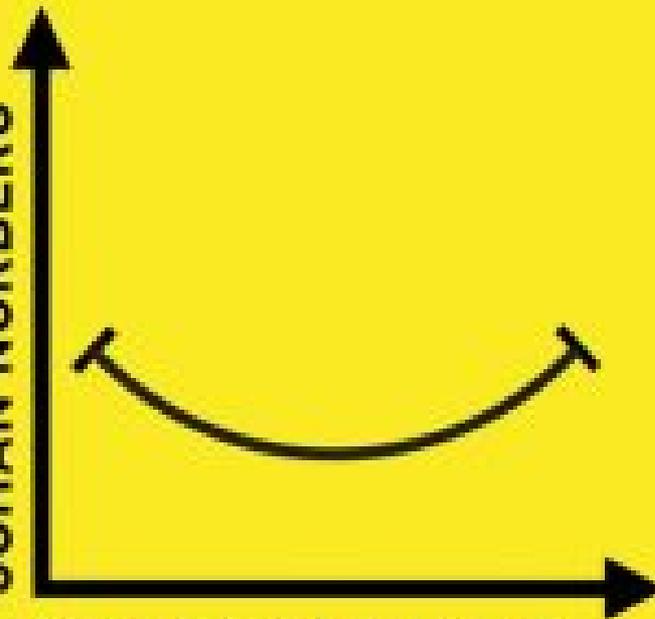
In the Year of 2019 hurricanes, tornadoes, floods and droughts unleashed a wave of destruction on our planet.

We didn't just lose homes and beach fronts, we lost entire cities...

Facing our own destruction...the world came together as one and we fought back.

SEE IT IN 3D

JOHAN NORBERG



PROGRESS

Ten Reasons to Look Forward to the Future

Famine was a universal, regular phenomenon.

Maternal mortality is still high in developing countries but in the last twenty-five years it has dropped sharply.

For the first time in world history, the absolute number of poor is reduced. For the first time poverty is not growing as population is growing.

War and violence used to be the natural state of humanity. Increasing health and wealth and smaller families seem to have made us value life more and this has resulted in more humanitarian attitudes and a stronger interest in peace.

Forty percent of the world's population now live in free countries...and another twenty-four percent live in partly free countries. This is more progress in two decades than in two millenia.

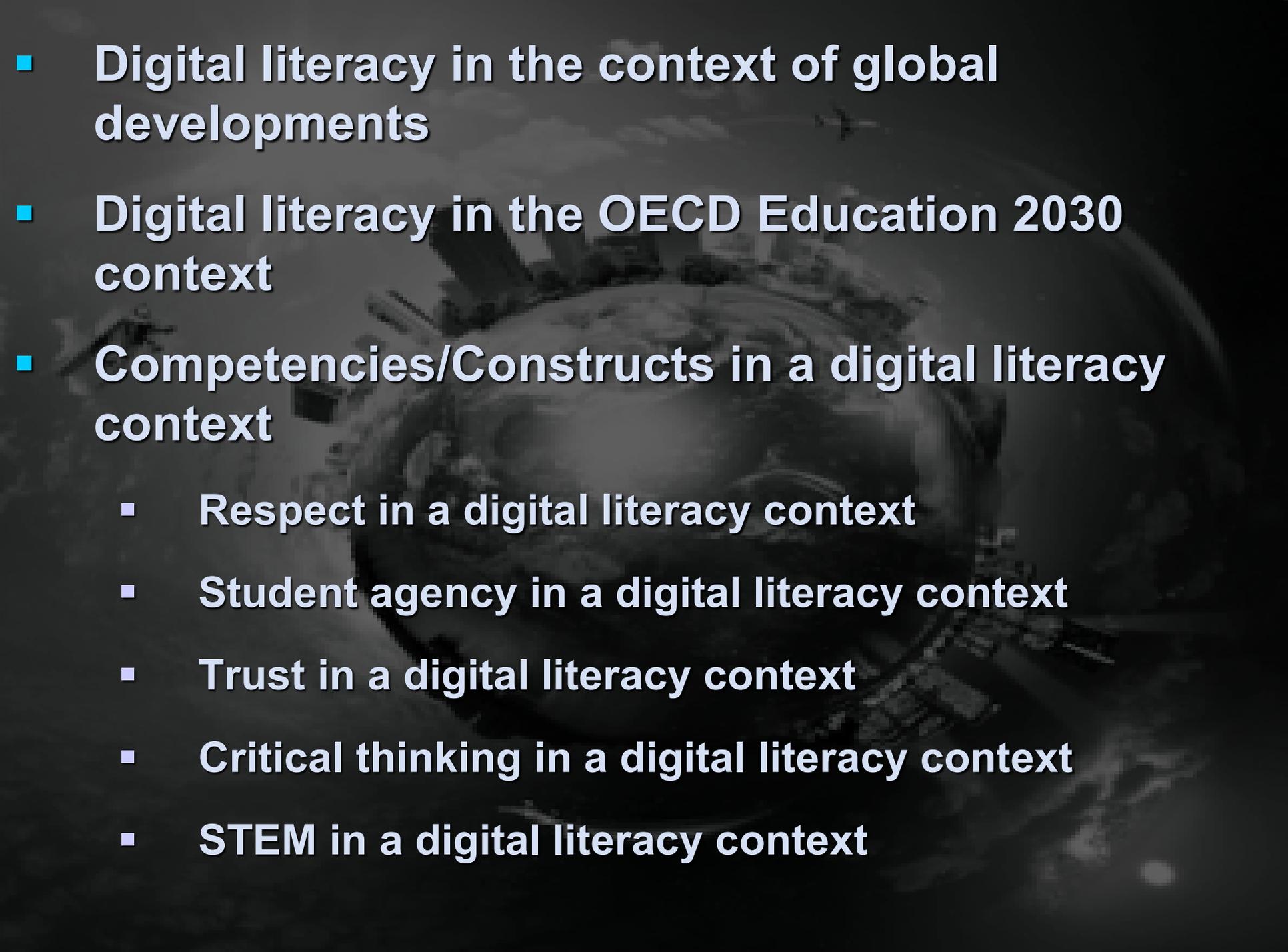
History is one long record of hatred against peoples that were considered inferior. But the historical trend is strong, and the forces that have contributed to tolerance – affluence, education, urbanization, visability – are at work globally.

JOHANN JOERGES

PROGRESS

Ten Reasons to Look Forward to the Future



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- **Digital literacy in the context of global developments**
 - **Digital literacy in the OECD Education 2030 context**
 - **Competencies/Constructs in a digital literacy context**
 - **Respect in a digital literacy context**
 - **Student agency in a digital literacy context**
 - **Trust in a digital literacy context**
 - **Critical thinking in a digital literacy context**
 - **STEM in a digital literacy context**

Global Developments: Why?

- A change duality: rapid advancement and rapid obsolescence...IoE...planned obsolescence
- VUCA: volatile, unpredictable, complex and ambiguous world (Bennett and Lemoine, 2014; Berinato, 2014)
- Transition: information to (new) knowledge-based economy...Industry 4.0
- Workplace reform – new kinds of competencies
- Ecological destabilisation, resource depletion and loss of biodiversity

Global Developments: Why?

- Gene technology: redefining relationships, evidence and production - benefits and ethical challenges
- Revolutionary technological change including new forms of communication
- Instability of norms and large scale value changes
- Substantial global inequalities and increasing gaps between the wealthy and the poor
- New forms of violence: Black Swan - unknown unknowns

Global Developments: What?

Responses

- Global interest in competencies (21st Century competencies: knowledge, skills, attitudes and values for this Century)
- LinkedIn economist, Guy Berger (2016): *“Hard skills vary based on the job, but soft skills are required for every job”*
- PISA surveys: 2015 collaborative problem solving; global competence in 2018 and creative thinking in 2021; social and emotional skills currently under development

Global Developments: What? Frameworks

- OECD Education 2030 Learning Framework
- UNESCO Transversal Skills
- US National Research Council: Deeper Learning and 21st Century Skills
- P21 (Partnership for 21st Century Learning)
- European Commission: Framework of Competencies for Lifelong Learning

Global Developments: What?

Themes

- **Economic competitiveness: Re-calibrating for a knowledge-based economy (new knowledge; new value)**
- **Employability skills and dispositions**
- **Citizenship (and identity)**
- **Social cohesion/Diversity**
- **Personal/Social Characteristics**

Global Developments: What?

- Being agile - having the flexibility of mind and the **skills/capacity to respond to unknown or unexpected circumstances**
- Being compassionate – **committed to reducing violence; respecting others, social cohesion**
- Being innovative – **acquiring entrepreneurial and innovative skills and attitudes**
- Being reflective and critical in one's response – **having social entrepreneurial behaviours; pro-social skills and behaviours**

- 
- Being Global in one's response and thinking – **international engagement skills and behaviours**
 - Being digitally literate – **having the skills/disposition to adapt to new technologies and understanding of risk**
 - Being positive about one's own potential and contribution – **wellbeing (personal and social); creating new value**
 - Being fair and just – sustainability (social; environmental; economic)...?
 - Being reliable – obligation to others; pro-environment...?

Global Developments: What?

Terminology

- **Adaptability/Flexibility/Agility - enterprising behaviours...?**
- **Compassion/Empathy/Sympathy/Trust – reducing violence; respect, social cohesion...?**
- **Creativity/Creative thinking/Inventive/Curiosity – entrepreneurial and innovative skills and attitudes...?**
- **Critical thinking – social entrepreneurial behaviours; pro-social skills and behaviours...?**

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- The background of the slide is a grayscale photograph of a large, multi-story building with a flagpole in front of it. The flagpole has several flags, including the national flag of the Netherlands. There are trees in the foreground on the right side. The overall tone is professional and academic.
- Global mindset/global citizenship/social responsibility – international engagement skills and behaviours...?
 - **ICT skills/Digital literacies**
 - Growth mindset/agency/optimism/challenge seeking/self-efficacy/motivated – wellbeing (personal and social)...?
 - Ethics/Integrity/Fairness – sustainability (environmental; economic)...?
 - Resilience/Grit – wellbeing...?
 - Responsibility – obligation to others; pro-environment...?

Competencies: Some Observations

- **Silva (2009): ...not new, just newly important**
- **Ontario (2016)...What's new in the 21st century is the call for education systems to emphasize and develop these competencies in explicit and intentional ways through deliberate changes in curriculum design and pedagogical practice**
- **The 21st Century competencies...the extent to which changes in the economy and the world mean that collective and individual success depends on having such skills and dispositions (Rotherham and Willingham, 2010)**

Competencies: Some Observations

- Without a definitive paradigm shift, many curricula will continue to fail to facilitate learning, they will continue to register poor learning outcomes, and they will remain irrelevant for the future (UNESCO, 2017)
- Lambert (2017)...the actual selection and prioritisation of competencies in countries is not universal. Different factors are influencing the choices governments are making based on their particular geo-political circumstances, social constructs and current and projected workforce trends and needs

Global Developments: Local Contexts



- **Europe (European Union)**
- **Former USSR/Soviet block (Estonia; Poland; Kazakhstan)**
- **Gulf States (UAE; KSA; Qatar; Kuwait)**
- **Asia (Japan; Korea; China)**
- **United Kingdom (England; Scotland/Wales/Nth Ireland); Ireland**
- **South America (Brazil; Chile; Argentina)**

Global Developments: Local Contexts

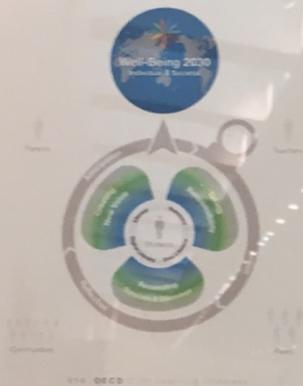
A faint, light-colored world map is visible in the background of the slide, centered behind the text.

- **Japan (3 competencies “Zest for Life”)**
- **Finland (7 competencies)**
- **Australia (7 general capabilities; 3 priorities)**
- **British Columbia (3 core competencies)**
- **Singapore (8 core skills and values)**
- **Brazil (10 general competencies)**
- **Qatar (7 key competencies)**
- **Kazakhstan (6 values; 5 core skills)**

OUR VISION

Education in and for the 21st Century will provide our young people with the knowledge, skills, values and attitudes for:

- **participating productively in the knowledge-economy**
- **making a positive contribution to society as active citizens**
- **being fair and honest and respecting others**
- **living healthy and satisfying lives**
- **acting responsibility in relation to the environment**



EDUCATION 2030

The Future of Education and Skills

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OECD Education 2030

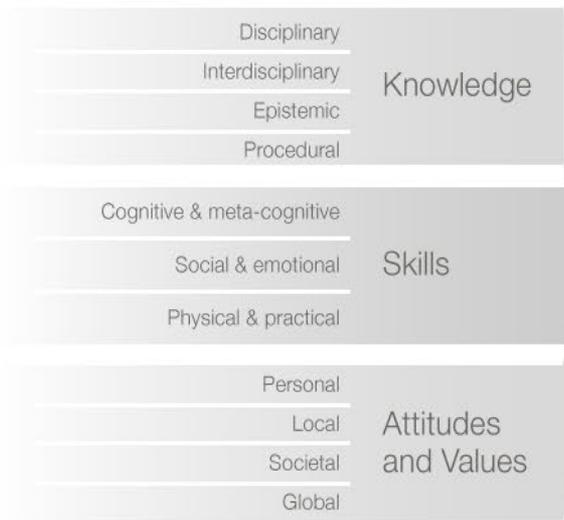
Education 2030 Learning Framework

- **What it isn't**
 - A global curriculum
 - A rejection of knowledge (disciplinary knowledge and fundamentals)
- **What it is**
 - A framework for countries to draw on when developing, reviewing or revising curricula
 - The basis for global dialogue about priorities, content relevance, balance, the purpose of schooling, challenges, solutions...
 - The basis for identifying design principles to avoid overload; enable deep learning and for advancing work on assessment strategies and initiatives

Education 2030

- Commenced in 2015
- 35+ countries participating +school networks +academics +social entrepreneurs
- 5 parts
 - Learning Framework
 - Curriculum Policy Analysis
 - Curriculum Content Mapping
 - Mathematics
 - Physical Education/Health
- Sample Issues:
 - Curriculum overload
 - Student Agency
 - Time-Lag
 - Values

The **OECD** Learning Framework 2030

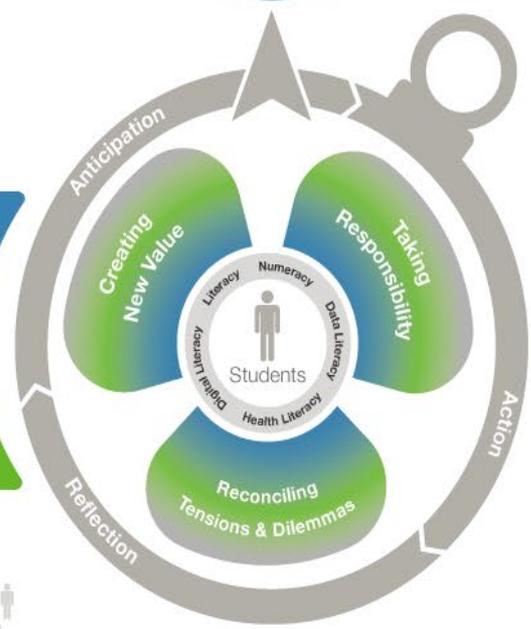


Parents

Teachers

Communities

Peers



Education 2030

Draft Competencies (constructs)

Foundational Literacies

- Literacy
- Numeracy
- **ICT Literacy/Digital Literacy**
- Data Literacy
- Physical/Health Literacy

Key concepts for the Learning Framework 2030

- Student agency
- Co-agency
- Creative Thinking
- Responsibility
- Conflict Resolution

Education 2030

Knowledge, Skills, Attitudes & Values for 2030

- Cooperation
- Critical thinking
- Problem Solving
- Self-regulation/self control
- Empathy
- Respect
- Persistence/Resilience
- Trust
- Learning to learn

Competency Development Cycle 2030

- Anticipation > Action > Reflection

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Education 2030

Compound Competencies for 2030

- Global competency
- Literacy for a sustainable development
- Entrepreneurship
- Computational Thinking/Programming/Coding
- Media literacy
- Financial literacy

EDUCATION

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Curriculum Content Mapping

Heat Map: Physical Education/Health

COMPETENCIES		Skills, Attitudes & Values for 2030							Key concepts of the 2030 Learning Framework				Competency Development Cycle for 2030			Compound Competencies for 2030					
		Communication (multi-literacies; CT)	Cooperation/collaboration	Critical thinking	Problem solving	Self-regulation/self-control	Empathy	Respect	Persistence/resilience	Student agency (e.g. motivation, purposefulness, growth mindset)	Creative thinking	Responsibility	Conflict resolution	Anticipation	Action	Reflection	Global Competency	Literacy for Sustainable Development	Entrepreneurship/enterprising	Digital literacy	Computational thinking/programming/coding
Content Codes	Strands and sub-strands	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	Games and Sports Skills																				
PHG1	Fundamental to advanced skills, understanding and attitudes required for minor games (e.g. ball skills; hitting/striking balls) and learning specific games for individuals, pairs and teams.	3	3	3	3	2	2	3	2	2	3	3	1	1	4	3	3	1	1	2	1
PHG2	Knowledge and understanding, skills; attitudes concerning particular sports; can include being a player or a referee/umpire and appropriate behaviours and learning about cooperation/teamwork. Learning rules.	3	3	3	3	2	2	3	2	2	3	4	2	1	4	3	3	1	1	2	1
	Movement skills and concepts																				
PHM1	Skills concerning the movement of the body through space (e.g. running, hopping, skipping). Gymnastics may be included as an area of learning. Swimming.	2	1	3	3	1	1	1	2	3	3	3	1	1	4	3	2	1	1	2	1
PHM2	Knowledge and understanding regarding key movement concepts, such as force, speed, projection etc.	2	1	3	3	1	1	1	1	3	3	3	1	1	4	3	1	1	1	2	1
	Physical Fitness																				
PHF1	Knowledge and understanding, skills and attitudes regarding maintaining fitness for a healthy lifestyle. Daily fitness exercises may be included.	2	2	3	3	2	2	1	2	3	3	3	1	1	4	3	2	2	1	2	1
	Dance/Rhythmic Movement																				
PHD1	Knowledge and skills regarding rhythmic movement, creative dance or folk dancing.	3	3	3	3	2	1	1	2	2	3	1	1	1	4	2	2	1	1	2	1
	Outdoor Education/Recreation Activities and Life Style Activities																				
PHO1	Understanding, skills and attitudes to enable physical, mental and spiritual practices concerning the human body. Such practices include yoga and martial arts, e.g. judo.	2	2	3	3	2	2	2	2	2	3	3	1	1	4	3	2	1	1	2	1
PHO2	Knowledge and understanding, skills and attitudes regarding activities and pastimes that students can engage in outside of school, e.g. hiking, skating, skiing, surfing, etc.	2	2	3	3	2	1	2	2	2	3	3	1	1	4	3	2	1	1	2	1
PHO3	Knowledge and understanding, skills and attitudes concerning human connectedness with nature.	2	2	2	1	2	1	2	1	2	3	1	1	1	4	2	1	3	1	1	1
	Food and Nutrition																				
PHF1	Knowledge and understanding and attitudes related to food groups and health food choices.	2	1	3	3	1	3	2	1	2	3	2	1	2	3	3	3	2	1	2	1
	Relationships Education																				
PHR1	Skills and attitudes concerning the formation and maintenance of relationships. This can include the development of understandings concerning positive relationships and strategies for managing negative relationships or identifying inappropriate relationships.	3	3	3	3	1	3	3	2	2	3	3	3	2	3	3	3	1	1	2	1
PHR2	Knowledge and attitudes regarding human sexuality including reproduction.	3	1	3	2	1	1	3	1	2	3	3	3	2	3	3	3	1	1	2	1
	Safety																				
PHS1	Knowledge, skills and attitudes regarding specific risks and dangers which may include road safety; water safety; sun protection; fire safety; first aid; sanitation; protective behaviours (e.g. child protection); drug education (e.g. alcohol and illicit drugs).	3	2	3	3	1	3	3	2	3	3	4	1	2	4	3	2	2	1	2	1
	Wellbeing/Mental Health and Managing Stress																				
PHW1	Knowledge, skills and attitudes concerning strategies for dealing with difficulties encountered; identifying strengths; thinking positively; developing resilience and how to manage difficult situations; and how to maintain wellbeing through safe and healthy choices. Issues such as body image can also be included.	3	2	3	3	2	3	3	2	3	3	3	3	2	4	3	3	1	1	2	1
PHW2	Knowledge and understanding, skills and attitudes concerning identifying and managing stress by recognising causes, indicators and strategies and actions to be taken to manage stressful situations.	3	2	3	3	2	3	3	2	3	3	2	2	2	4	3	2	1	1	2	1

Respect in a Digital Literacy Context

- Different concerns/issues: elderly; the ruling party; cultural/religious difference; gender
- Australia: Respectful Relationships Education (COAG – National Plan/Our Watch)
- The Line...
- Porn (Typical age of first pornography viewing: 13 years (males) and 16 years (female); porn is a common source of information about sex – 64% (males) identifying it as where they receive sexual health information More than 90% (male) and more than 60% (female) aged 13-16 had seen online pornography)
- Privacy – Instagram; youtube (responsible behaviours... the right to know/to choose)
- “Public spaces”... public transport; cinemas; restaurants... (rules/laws v self-regulation)

Student Agency in a Digital Literacy Context

- Personalising learning... giving voice to students; self-direction
- Portugal; Scotland; Japan
- “Insiders” – what am I expected to learn?
Is there a fixed order (does there have to be)? What are the best sources of information on this/these topics? How might I package this to suit my interests/learning?

Trust in a Digital Literacy Context

- Apparent loss of trust in “institutions”
(government; public agencies; professionals eg doctors, religious guides; information sources; brands eg VW; Cambridge; FIFA)
- More a shift in trust than a loss...distributed to:
machines; unregulated services; “champions”;
peers/”friends”; Dr Google; online communities
- “Institutional trust was not designed for the digital age” (Botsman)...
- Local>Institutional>Distributed trust
- Catfishing...instinct; location; behaviour
- ”Trust Pause” needed: an interval before swiping, clicking, sharing, accepting; critical thinking skills

Critical Thinking in a Digital Literacy Context

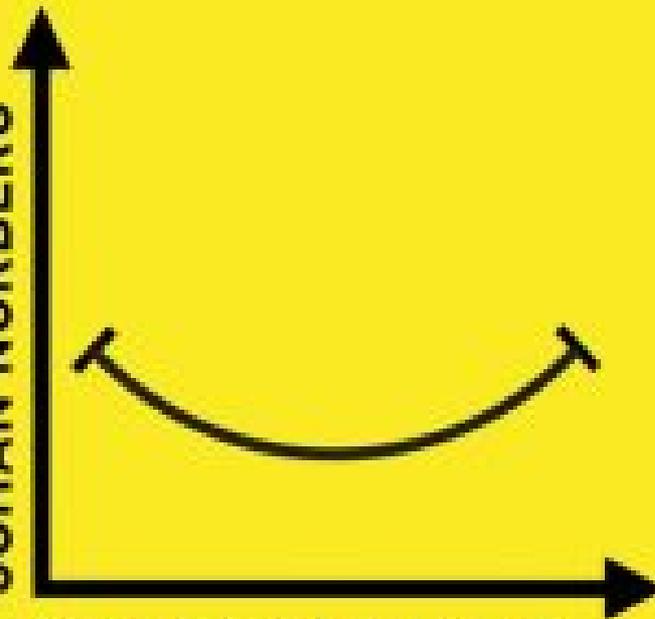
- Recognising/developing an argument, using evidence in support an argument, drawing reasoned conclusions, using information to solve problems
- Interpreting, analysing, evaluating, explaining, sequencing, reasoning, comparing, questioning, inferring, hypothesising, appraising, testing and generalising.
- Not universally accepted as a desired competency (unquestioning compliance/agreement)
- Semantic web (web 3.0)... Alibaba... What's my role in this...self-control
- Symbiotic web (web 4.0)...slave/servant or master?

**CRITICAL
THINKING**

Empathy in a Digital Literacy Context

- Exposure to... graphic images (cruelty; violence; distress; subjugation; poverty)
- Desensitisation; acceptance
- Valued dispositions: care; emotional intelligence; empathetic behaviour... in life, family, relationships and work
- Skills/strategies needed to counter conditioning/desensitisation... self-regulation; significant adults modelling empathy; understanding commonalities (differences are obvious); critical thinking... challenging justifications; considering multiple perspectives; respect; how power is/can be exercised...for evil; for good

JOHAN NORBERG



PROGRESS

Ten Reasons to Look Forward to the Future

The fact that things have been getting better – overwhelmingly so – does not guarantee progress in the future.

Progress is not automatic.

Progress is the result of hard-working people, scientists, innovators and entrepreneurs with strange, new ideas and brave individuals who fought for their freedom to do things in new ways. If progress is to continue, you and I have to carry the torch

JUCIAN NOBERG

PROGRESS

A movie poster for the film "Geostorm". The background shows a man and a woman embracing in the middle of a city street that is completely flooded with turbulent, blue-tinted water. The water appears to be crashing down from above, creating a massive wall of water in the distance. The city buildings are dark and silhouetted against the bright, chaotic water. The overall mood is one of disaster and emotional connection.

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GEOSTORM

SEE IT IN 3D



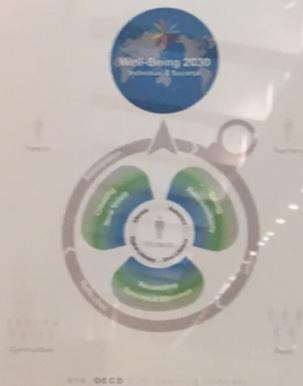
You can't undo the past

**All you can do is face what's
ahead**

GERARD BUTLER JESSICA CHASTAIN RYAN REYNOLDS WITH ELIZABETH HARRIS AND ANNE HATHAWAY
STURGESS CORNISH HARRIS GARCIA

G E O S T O R M

SEE IT IN 3D



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Volatile

Unpredictable

Complex

Ambiguous

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**How well (in a digital literacy/competencies context)
are we preparing our young people for today's and
tomorrow's world?**

Enough

