

THE QUEST FOR SUSTAINABILITY

C. E. Heinzl, University of Northern Iowa , Dept. of Earth and Environmental Sciences

#SustainableUNI

CERTIFICATE *in*
SUSTAINABILITY
University of Northern Iowa

- Are we perfect? No, but we are able and working toward the Quest 😊
- Get involved
- Work small , Think big
- Sustainability Certificate
- IGEIN Sustainability webpage



United Nations

Oct. 24, 1945

San Francisco

50 Countries

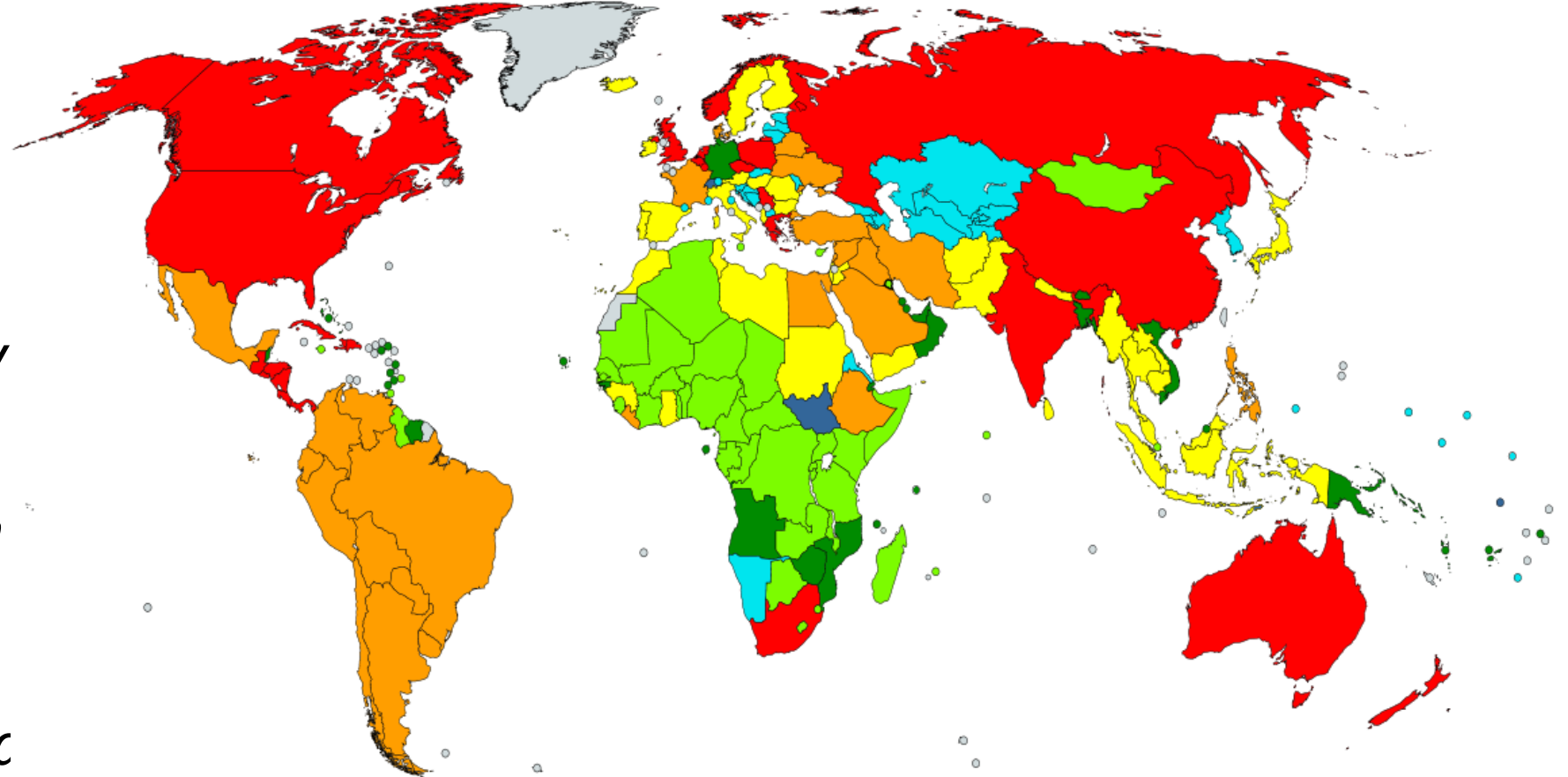
Peace, dignity, and equality on a healthy planet

USA withdraws from Human Rights Commission with North Korea, Iran and Eritrea



SUSTAINABLE DEVELOPMENT GOALS

17 GOALS TO TRANSFORM OUR WORLD



Members of the United Nations

■ Founding members (1945) and original signatories of the declaration of the United Nations (1942)

■ Other founding members (1945)

■ New members (1946-1959)

■ New members (1960-1969)

■ New members (1970-1989)

■ New members (1990-1999)

■ New members (2000-2014)

1 NO POVERTY



2 ZERO HUNGER



3 GOOD HEALTH AND WELL-BEING



4 QUALITY EDUCATION



5 GENDER EQUALITY



6 CLEAN WATER AND SANITATION



7 AFFORDABLE AND CLEAN ENERGY



8 DECENT WORK AND ECONOMIC GROWTH



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



10 REDUCED INEQUALITIES



11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



14 LIFE BELOW WATER



15 LIFE ON LAND



16 PEACE, JUSTICE AND STRONG INSTITUTIONS



17 PARTNERSHIPS FOR THE GOALS



**SUSTAINABLE
DEVELOPMENT
GOALS**

Health & security

Poverty

Hunger/Food security

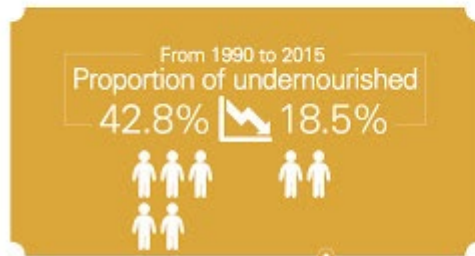
Equality

Wellness

3 GOOD HEALTH AND WELL-BEING



2 ZERO HUNGER

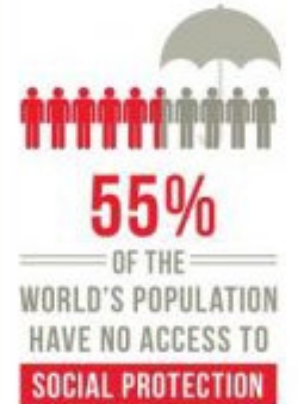
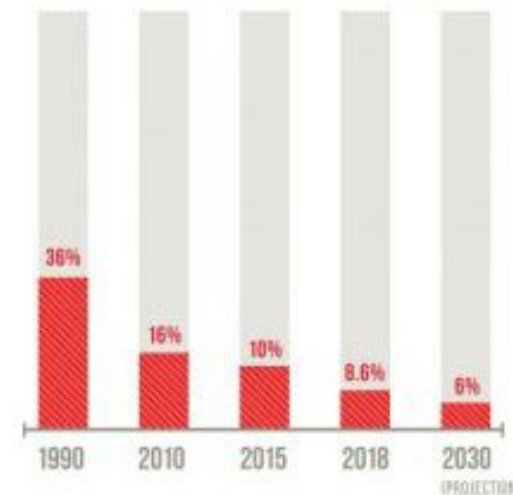


Source: Lao PDR Country Analysis Report 2015, Lao Social Indicator Survey 2016/17

1 NO POVERTY

END POVERTY IN ALL ITS FORMS EVERYWHERE

THE WORLD IS NOT ON TRACK TO END POVERTY BY 2030



736 MILLION PEOPLE LIVED IN EXTREME POVERTY IN 2015, 413 MILLION IN SUB-SAHARAN AFRICA



MORE THAN 90% OF DEATHS DUE TO DISASTERS OCCUR IN LOW- AND MIDDLE-INCOME COUNTRIES

Sustainability, language is important

Noun

- 1. Sustainability** - the ability to be maintained at a certain rate or level "*the sustainability of economic growth*"
- 2. Sustainability** - avoidance of the depletion of natural resources in order to maintain an ecological balance. "*the pursuit of global environmental sustainability*"

Sustainable Development

Noun

Sustainable development - economic development that is conducted without depletion of natural resources. "*international policies should support sustainable development*"

Jared Diamond – *Collapse*

1. Environmental mismanagement
- Inadvertent, *Connection to and understanding of our Environments*
- *Because your society depends on...*
2. Climate change (warming or cooling)
3. Hostile neighbors
willing to fight *Effective and open communication*
Creativity, ingenuity and hard work
4. Once friendly neighbors
Social awareness : you
5. Political, social, culture factors

How do we get there? – Responsibility

1. You, The Individual's Role in a Civilization
2. Extreme ownership
3. Quality Education to meaningful/purposeful careers
4. Think Critically
5. Effective and open communication
6. Creativity, ingenuity and hard work
7. Social awareness
8. Connection to and understanding of our Environments
9. Health and security
10. Understand scale and time



Many
Hands
Make
Light
Work

How do we get there?

1. You, The Individual's Role in a Civilization
2. Extreme ownership
3. Liberal arts education
4. Think critically
5. Effective and open communication
6. Creativity, ingenuity and hard work
7. Social awareness
8. Connection to and understanding of our environments
9. Health and security
10. Scale and time



Margaret Mead

"Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has."

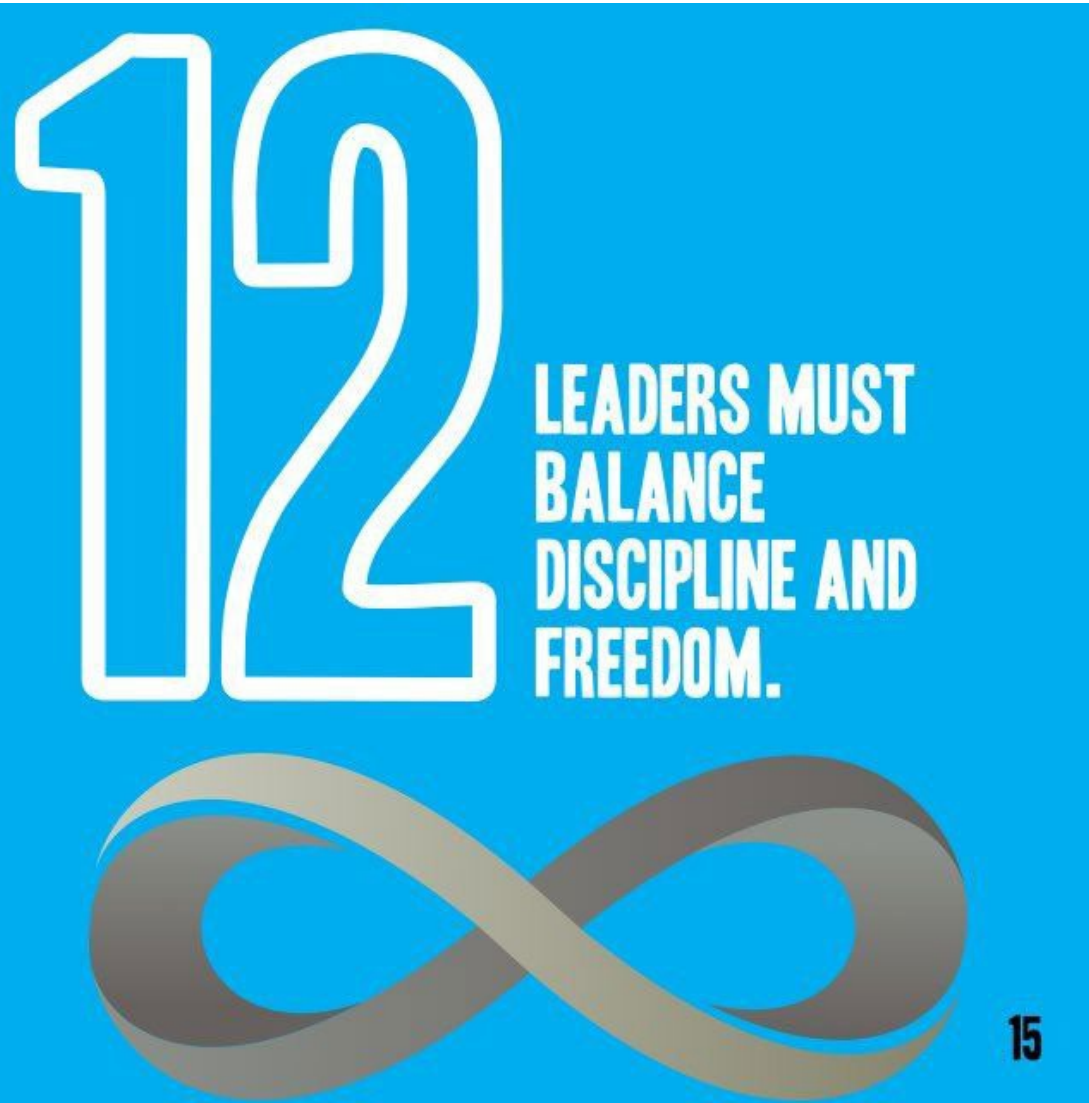
Individuals can't solve the climate crisis, alone; Governments and Industries need to step up!

Anders Levermann

People do have a responsibility –
to stay informed and demand
the politicians make the planet
their priority



Extreme ownership/Leadership



Quality Education/ Lifelong learning



- A. General Education Prep
- B. Never stop learning
- C. Be adaptive and flexible
- D. Use digital technologies as a tool not a crutch



Robin Wall Kimmerer



- It is important to blend diverse perspectives when addressing complex problems
 - E.g. Native American wisdom with scientific knowledge
- Language is important
 - The grammar of animacy
- Is sustainability enough?
 - The power of reciprocity

Think & Act Critically

- Know where and how to access reliable information



- Ability to distinguish knowledge from opinion
 - **2019 - Only 14% of Americans were able to do this!**

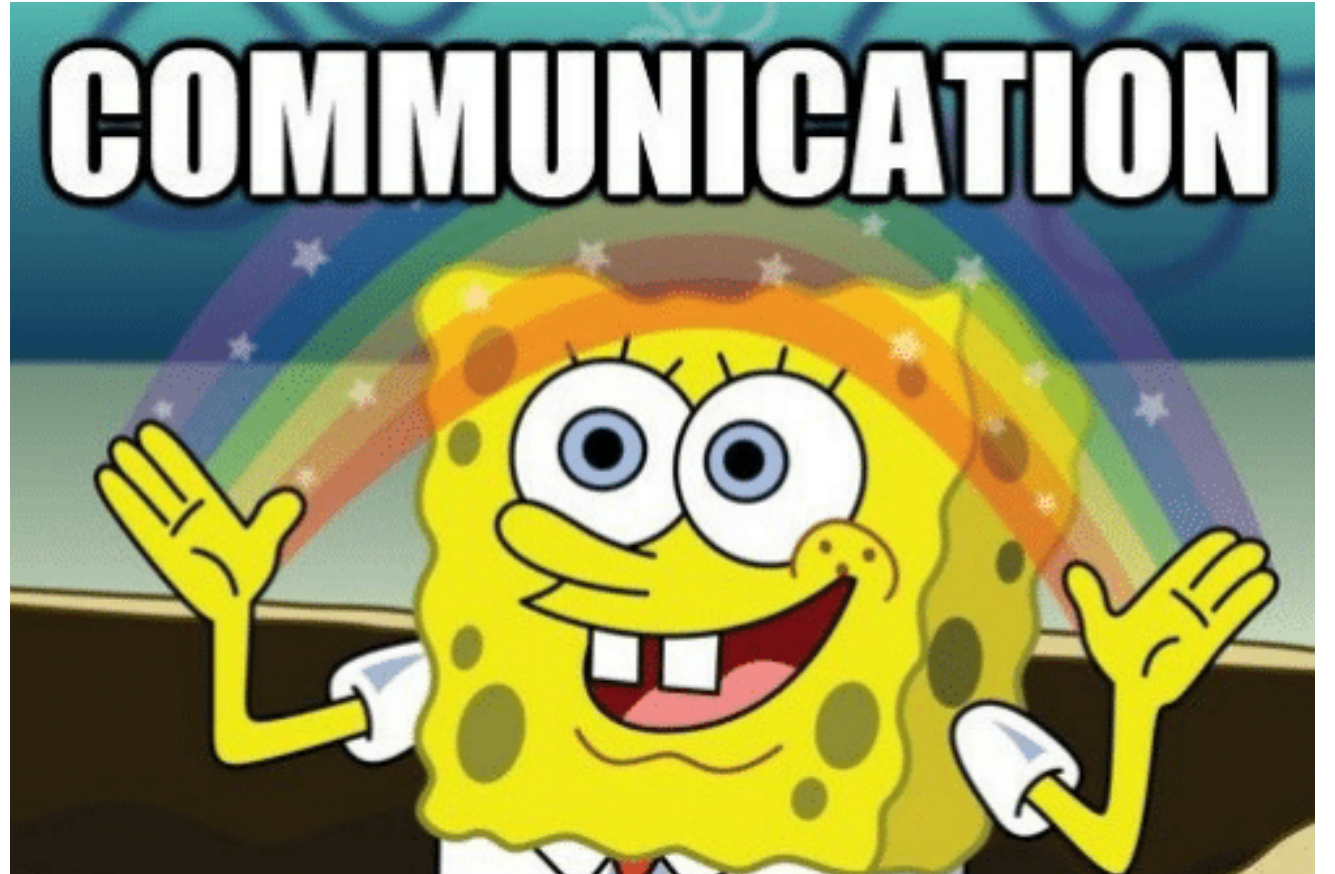
- Be comfortable incorporating new information into your past and current life experiences to make informed decisions



Think for yourself, Question authority
Tool, Third Eye

Effective & open communication

- Reading, writing, speaking (personally and digitally)
- Qualitative and Quantitative
- KNOW YOUR AUDIENCE
- Be able and willing to peacefully interact with people that have different backgrounds, beliefs, ideals...

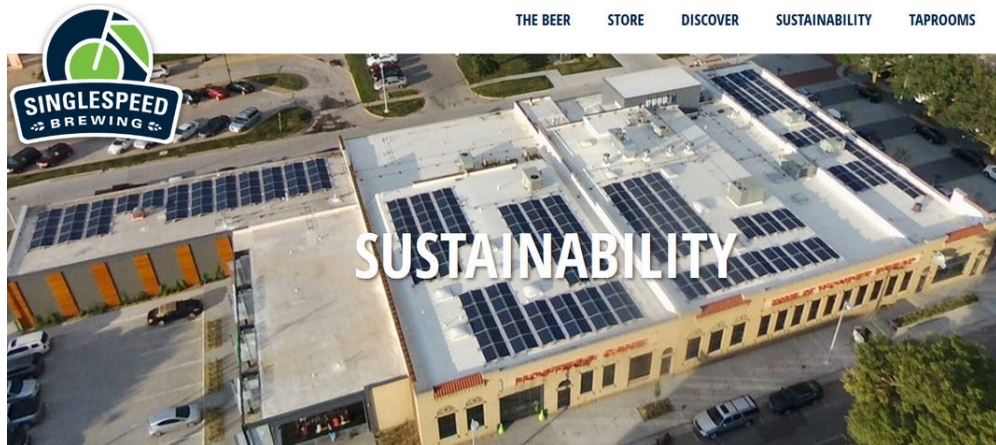
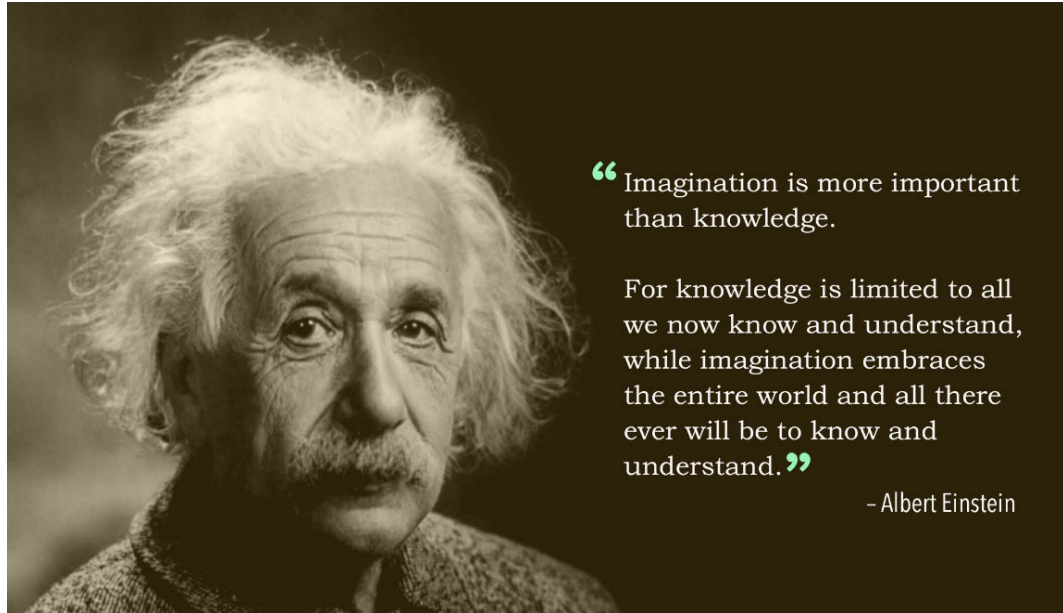


Katharine Hayhoe

- Do talk about the environment and climate change
- Talk about what matters to people, be able to relate to diverse audiences
- Remain positive, what we do today and tomorrow has never been more important. Our individual and collective actions are important.
- Make time for creative outlets.



Creativity, ingenuity & hard work



Rachel Beck



Social awareness – Courage & Empathy

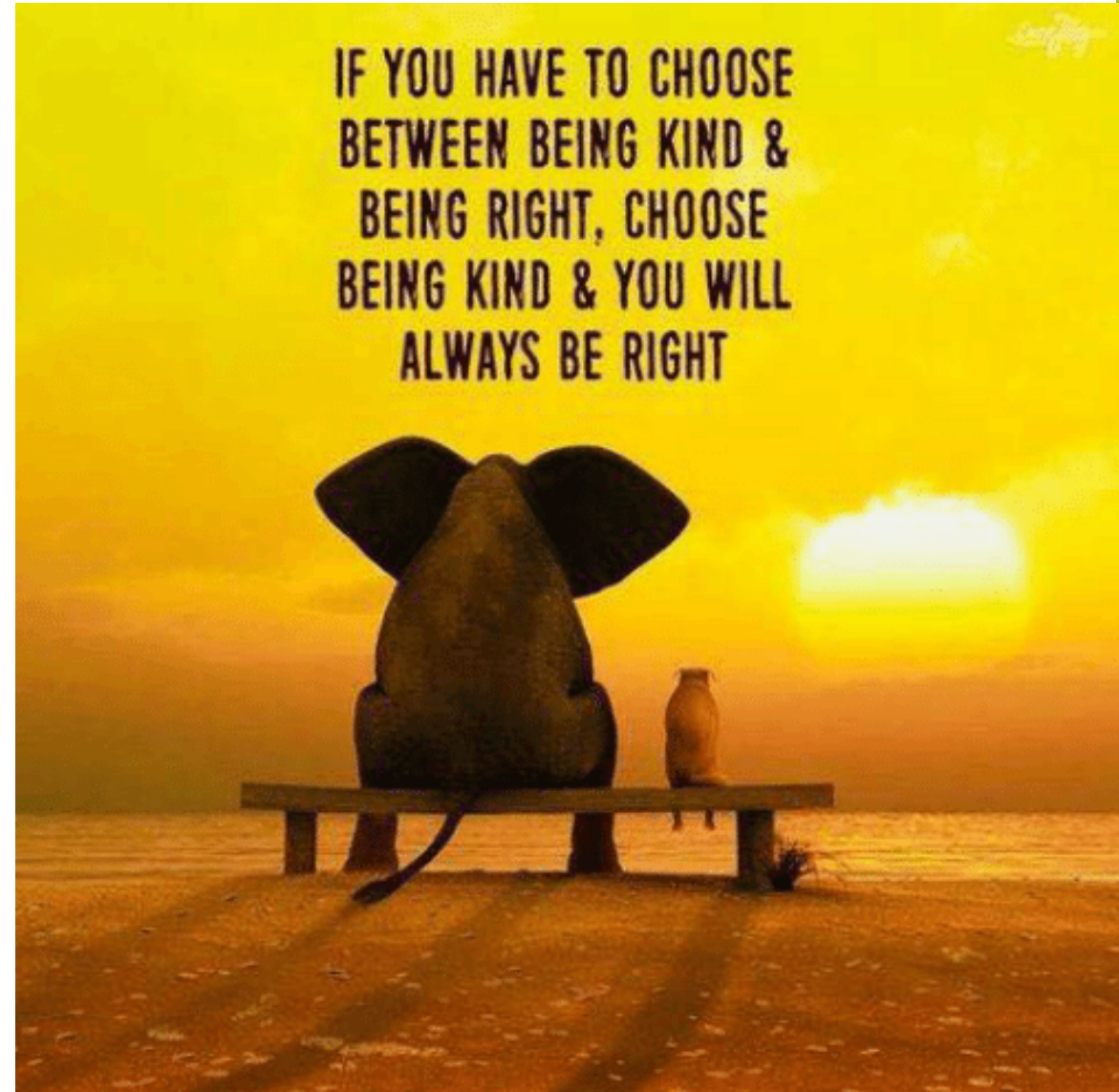
Are we working together,
looking out for one another?

NO – Can we be better - YES

Is *Social Media* the answer OR
the problem?

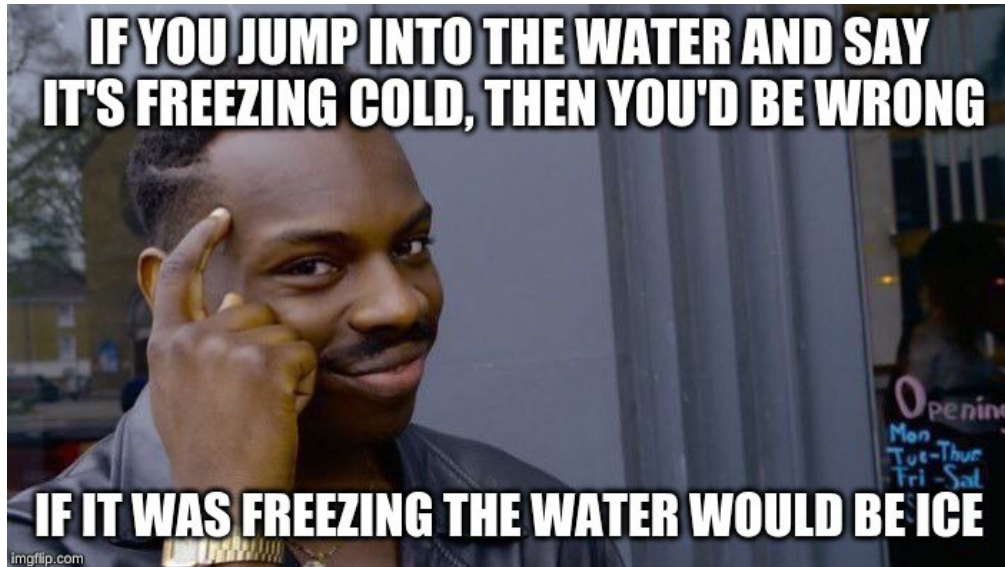
What do you truly like Vs. What
are you marketed to like

<https://www.theatlantic.com/magazine/archive/2020/03/climate-change-peer-pressure/605515/>



Connection to & understanding of our Environments

Science



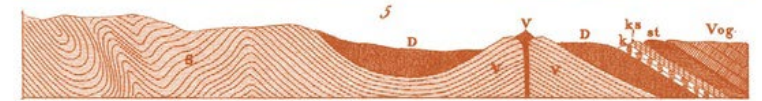
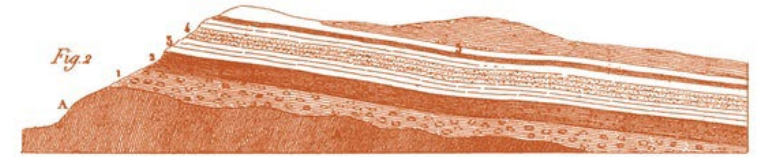
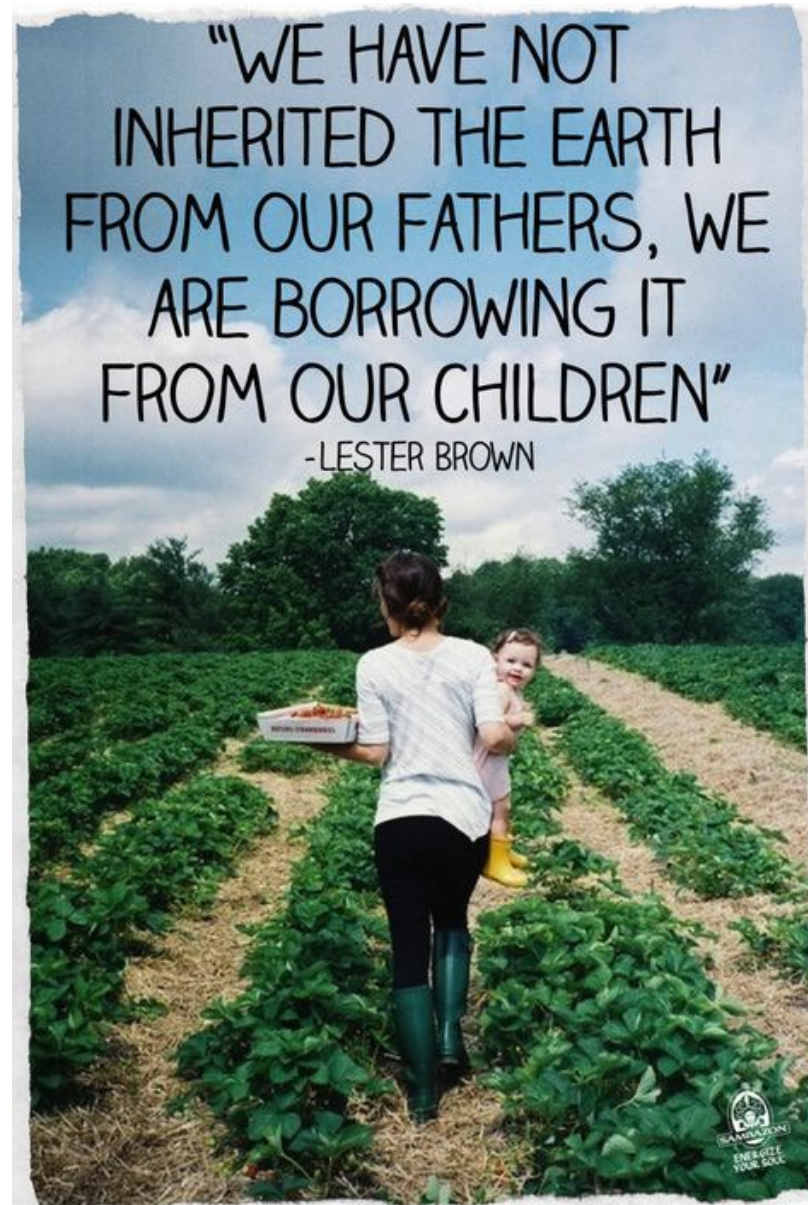
Nature deficient disorder/
No child left inside

Outdoor recreation

Sense & connection to place

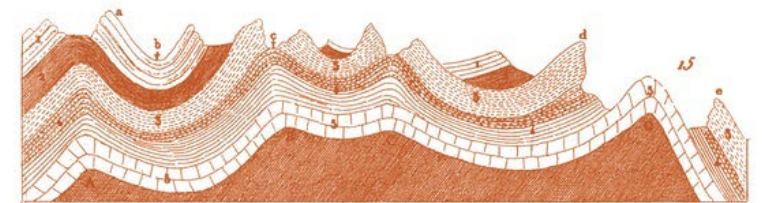
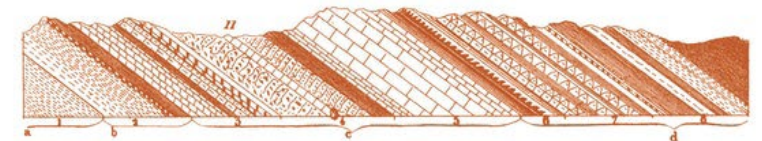


Scale & time



TIMEFULNESS

HOW THINKING LIKE A GEOLOGIST
CAN HELP SAVE THE WORLD



MARCIA BJORNERUD

NPR Market Place - Larry Fink

- Jonny Martin – ‘Long-term returns require looking into more than profits’
- Kelly Biscoglia ‘Companies who focus on long-term issues will be more successful’
- Numerous of you 😊 –
 - Good companies are built upon Good employees.
 - Good companies take care of their employees, their families and retirements.
 - Good companies are built on complex adaptive coalitions (Ref. Smith and Friedman)

Good Civilizations are built upon Responsible citizens

