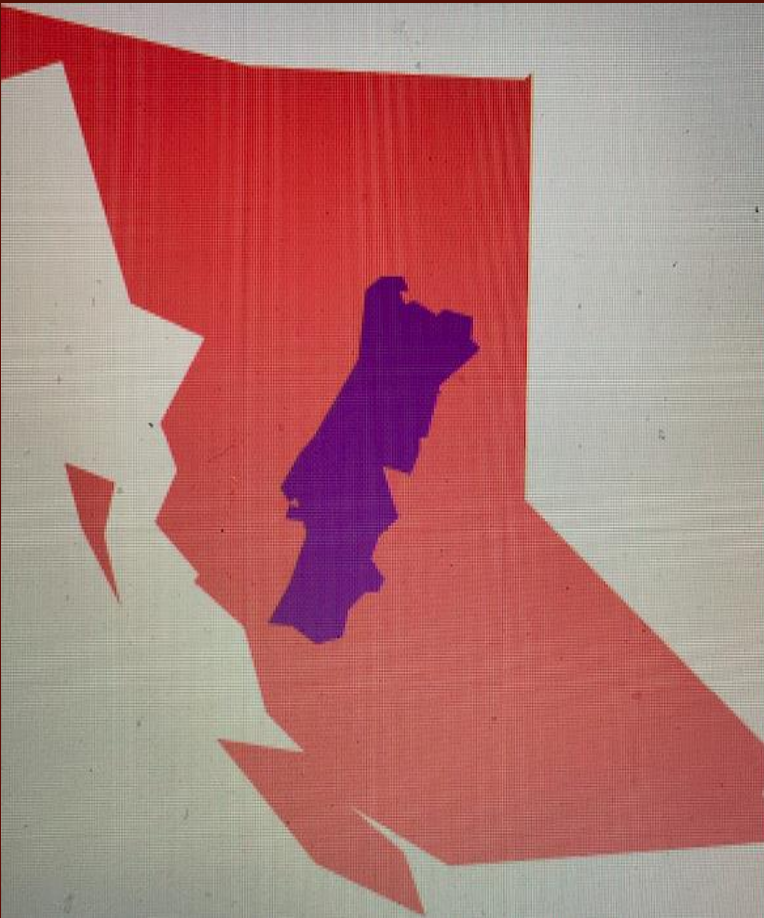


Figueira da Foz



Rod Allen – British Columbia, Canada

BC and Portugal



- Portugal has twice the population of BC
- BC is 10 times the area of Portugal

OVERVIEW OF B.C.'S STUDENTS



635,037 students

65,607 Aboriginal students

64,714 English language learners (ESL)

48,309 French Immersion students

13,040 International students

60 public school districts

1,600 public schools

553,387 public school students

WHAT ELSE YOU SHOULD KNOW ABOUT US

**WE
BELIEVE**

All kids can learn

We have strong teachers

Student learning is at the core

In networks / collaboration

We are all learners

Equity is is foundational

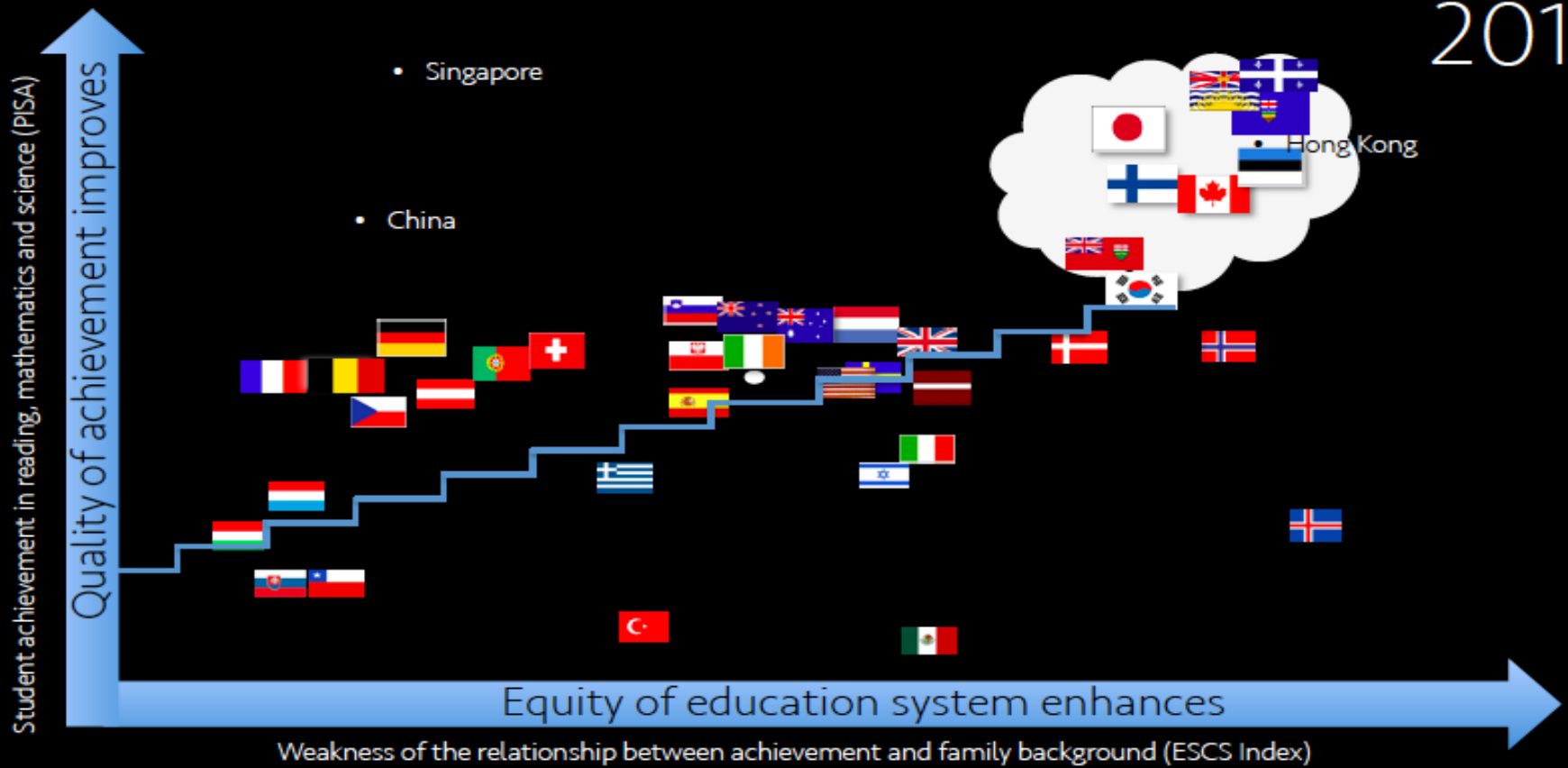
OUR RANK ORDER

	2015	2012	2009
Reading	1	6	8
Science	3	6	8
Math	9	12	16



Andreas Schleicher, OECD

PISA 2016

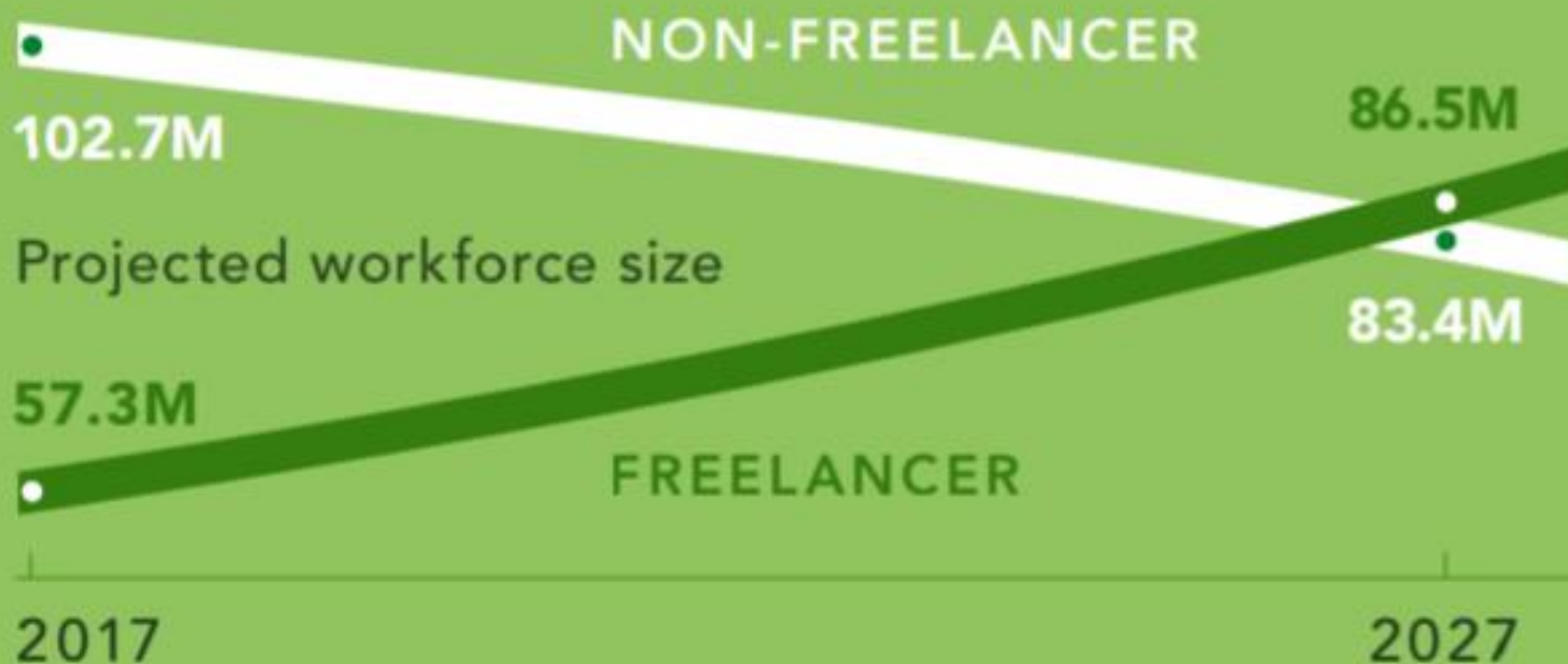


How Much do you Remember (that matters)?



UBC 1975

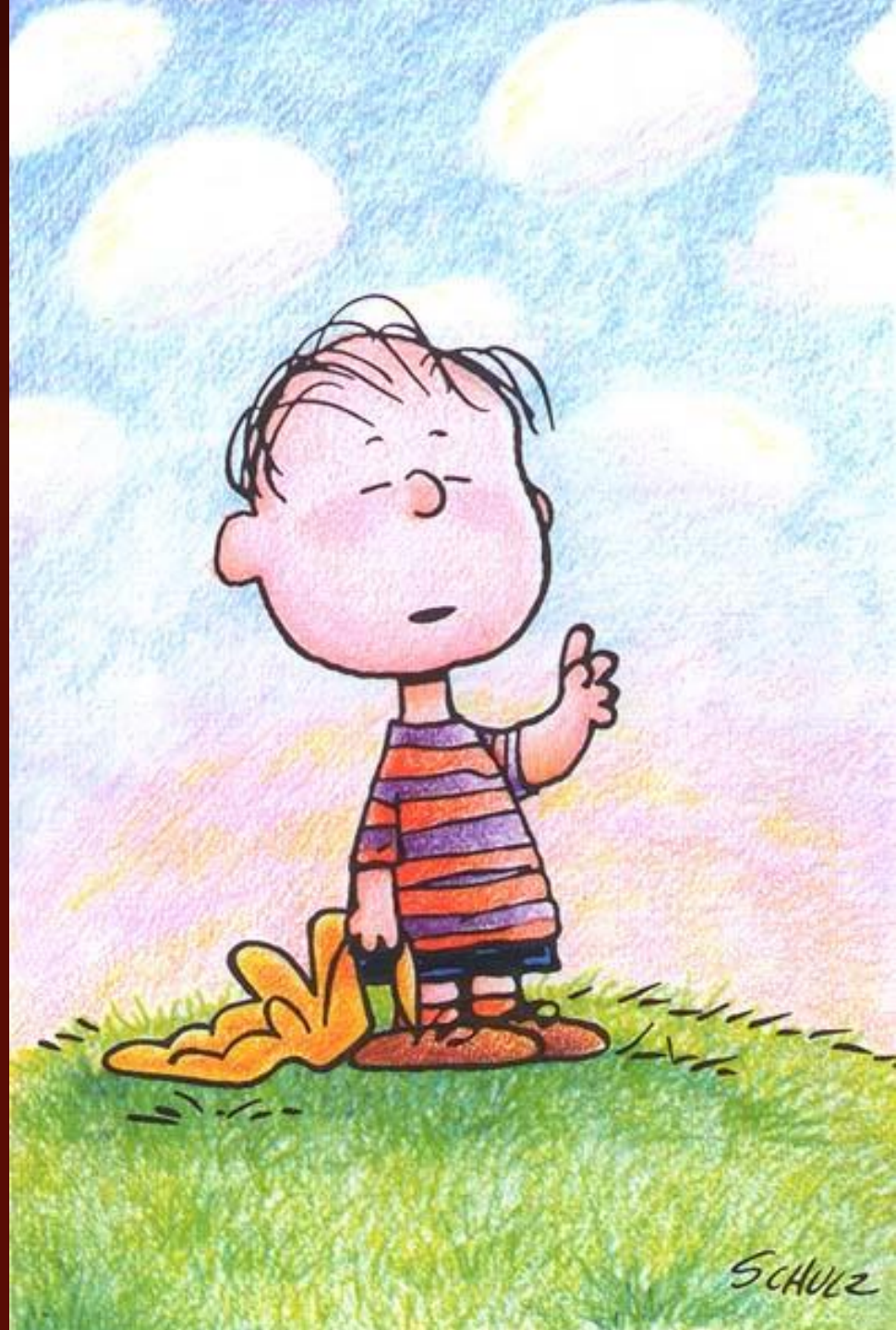
The majority of workers will freelance by 2027



It's amazing to fathom that, right now, we have no idea how three out of every five 6-year-olds will eventually make their living. Yet those children will spend the next 12-plus years studying a curriculum that was developed 50—or, in some countries, over 100—years ago.

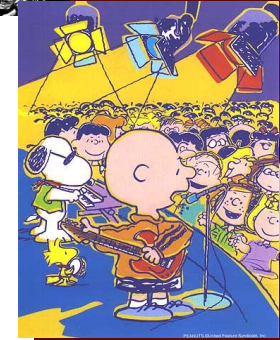
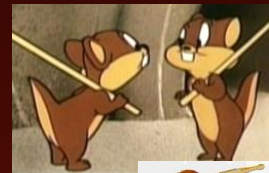
World Economic Forum, 2016

ME (THE KID)



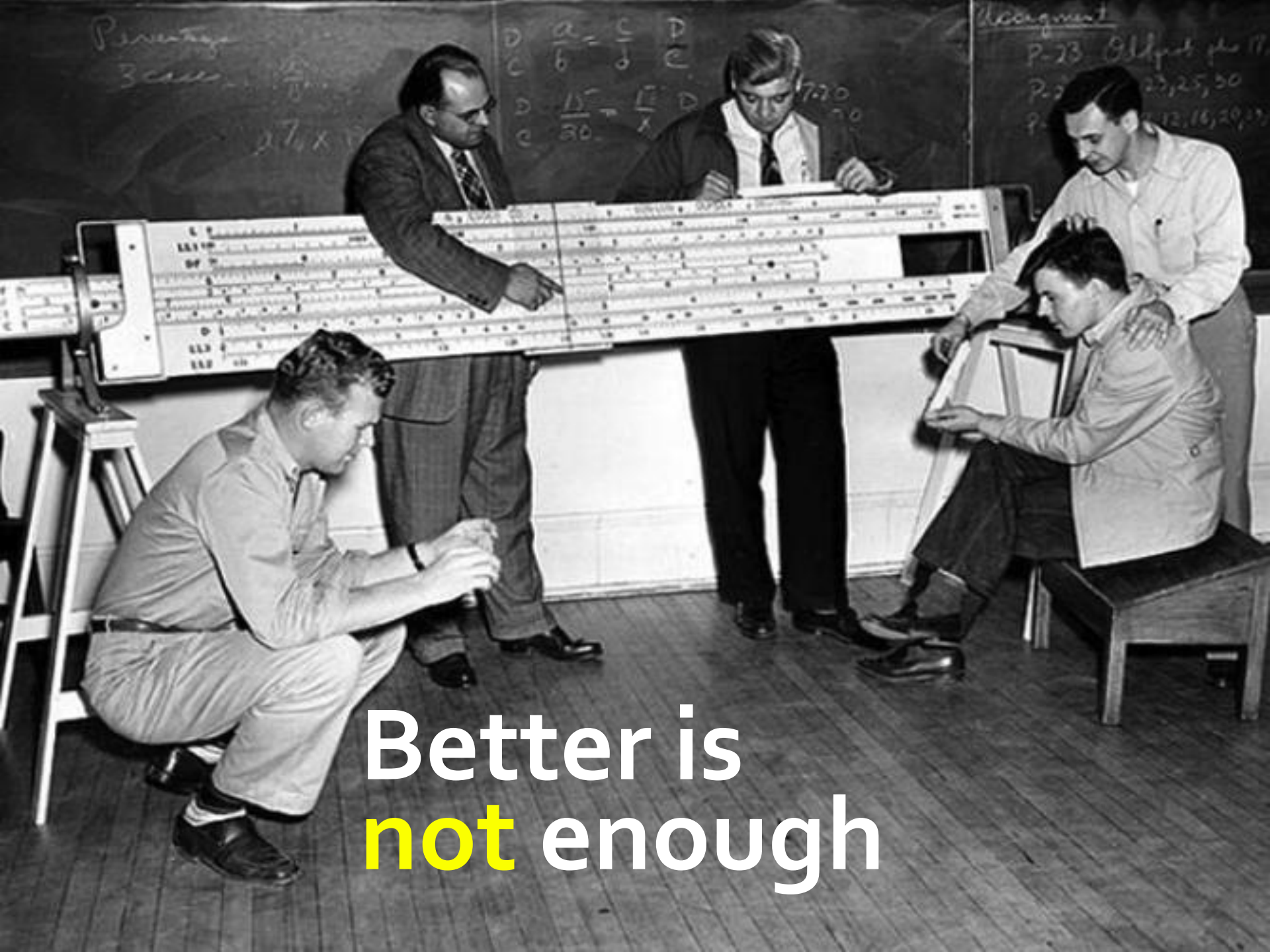
WHAT I EXPECTED AS A TEACHER





Our Learners

Stand up if you feel that there are more students with emotional challenges in school than there were 5 years ago.



Better is
not enough

THE SECOND MACHINE AGE

WORK, PROGRESS, AND PROSPERITY
IN A TIME OF
BRILLIANT TECHNOLOGIES

ERIK BRYNJOLFSSON
ANDREW McAfee



The Road to Collaboration

The dawning realization...

We have more things in common than divide us.

Who? Government, unions, public schools, independent schools, parents

AND business, industry, community!

The same old behaviors won't get us what we collectively want.

THE EDUCATED CITIZEN

- thoughtful, able to learn and to think critically, and who can communicate information from a broad knowledge base;
- creative, flexible, self-motivated and who have a positive self image;
- capable of making independent decisions;
- skilled and who can contribute to society generally, including the world of work;
- productive, who gain satisfaction through achievement and who strive for physical well-being;
- cooperative, principled and respectful of others regardless of differences;
- aware of the rights and prepared to exercise the responsibilities of an individual within the family, the community, Canada, and the world.

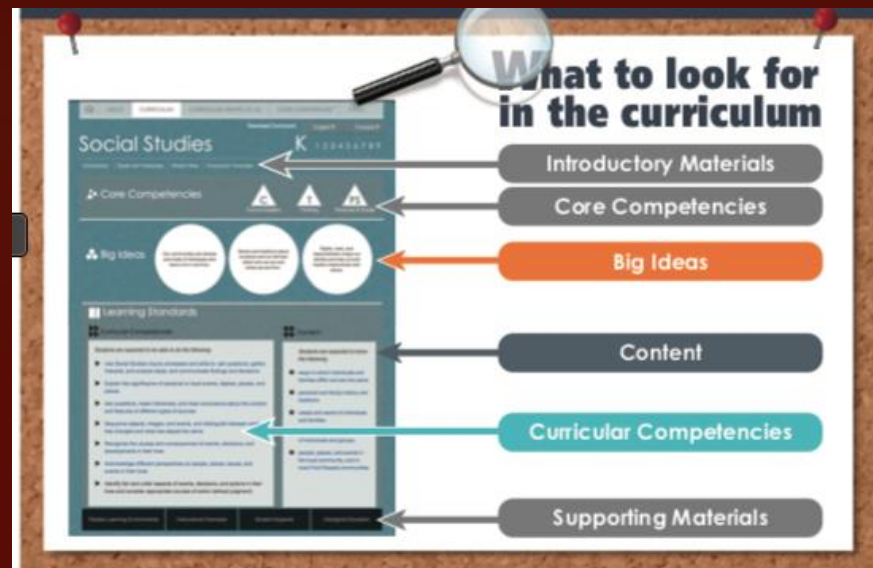
FIRST PEOPLES PRINCIPLES OF LEARNING

- Ultimately supports the well-being of the self, the family, the community, the land, the spirits, and the ancestors.
- Is holistic, reflexive, reflective, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place).
- Involves recognizing the consequences of one's actions.
- Involves generational roles and responsibilities.
- Recognizes the role of indigenous knowledge.
- Is embedded in memory, history, and story.
- Involves patience and time.
- Requires exploration of one's identity.
- Involves recognizing that some knowledge is sacred and only shared with permission and/or in certain situations.

Implications for the Ministry of Education...

- Curriculum
- Reporting
- Letter Grades
- Audits
- Transcripts
- SIS
- Funding Formula
- Capital
- Vulnerable kids
- Required Areas of Study
- Scholarships/Awards
- Provincial Exams
- Graduation Credentialing
- Teacher Education
- Accountability Framework
- Student safety

BC'S RE-DESIGNED CURRICULUM



Highlights of BC's Redesigned Curriculum

• Personalized Learning

The redesign of BC's curriculum provides flexibility to inspire the personalization of learning and addresses the diverse needs and interests of BC students.

• Ecology and the Environment

Revisions to the Science curriculum were made to ensure better representation of ecology and environmental learning.

• Historical Wrongs

The curriculum includes the history of the Asian and South Asian communities and their contributions to the development of our province—as well as the injustices they experienced.

• Aboriginal Perspectives and Knowledge

Aboriginal culture and perspectives have been integrated throughout all areas of learning. For example, place-based learning and emphasis on indigenous ways of knowing reflect the First Peoples Principles of Learning in the curriculum.

• Flexible Learning Environments

BC's redesigned curriculum provides teachers with great flexibility in creating learning environments that are relevant, engaging, and novel. Flexible learning environments give consideration to local contexts and place-based learning.

Social Studies

K 1 2 3 **4** 5 6 7 8 9 All

[What's New](#)[Goals & Rationale](#)

Download:

[ENGLISH](#)[FRANCAIS](#)

Core Competencies in Social Studies



Thinking



Communication



Personal & Social

Big Ideas

Social, economic, and political power shift over time.

The nature of European expansion into North America was influenced by a variety of geographic factors.

Economic interdependence can lead to co-operation, competition, and conflict between societies.

Cultures change as they become integrated into a larger society.

Learning Standards

Curricular Competencies

Students will develop competencies needed to be active, informed citizens.

- ▶ Use Social Studies inquiry processes (ask questions, gather, interpret and analyze ideas, and communicate findings and decisions)
- ▶ Construct an argument defending the significance of individuals/groups, places, events, and/or developments (significance)
- ▶ Ask questions and corroborate inferences about the content and origins of different sources (evidence)
- ▶ Determine continuities, changes, patterns, and trends between different time periods, places, and phenomena (continuity and change)
- ▶ Determine multiple causes and consequences of an event, decision, or development (cause and consequence)
- ▶ Explain different perspectives on past or present people, places, issues, and events (perspective)
- ▶ Evaluate whether an event, decision, or action was fair from a particular perspective (ethical judgment)

Concepts and Content

*Students will know and understand concepts and content related to **Contact Between European and Aboriginal Communities**:*

- ◆ early contact, trade, and conflict between Aboriginal and European societies
- ◆ the fur trade in pre-Confederation Canada and British Columbia
- ◆ demographic changes in pre-Confederation British Columbia in both Aboriginal and non-Aboriginal communities
- ◆ economic and political factors that influenced the colonization of British Columbia, including the BC gold rushes
- ◆ the impact of colonization on Aboriginal societies
- ◆ the history of their local community, and connections between their community and significant events, people, and developments

Science

K 1 2 3 4 5 6 7 8 9

Science Overview

Goals and Rationale

Download: [English](#) [Français](#)

Core Competencies

C
Communication

T
Thinking

PS
Personal & Social

Big Ideas

Humans live in constant interaction with micro-organisms.

An element's properties are related to the arrangement and energy of its electrons and to its atomic size.

The interaction of electrons allows atoms of different elements to form compounds.

The four fundamental forces govern the interactions of matter.

Quantum theory is based on electromagnetic radiation behaving like both a particle and a wave.

Earth is composed of four interacting spheres through which matter cycles.

Learning Standards

Curricular Competencies

Students will be able to inquire by

Questioning and predicting

- ▶ *Demonstrate a sustained intellectual curiosity about a scientific topic or problem of personal interest*

Concepts and Content

Students will know and understand the following concepts and content

- ◆ *the impact of micro-organisms in their body*
 - *viruses and bacteria*

Curricular Competencies

Students will be able to inquire by

Questioning and predicting

- ▶ Demonstrate a sustained intellectual curiosity about a scientific topic or problem of personal interest
- ▶ Make observations aimed at identifying their own questions, including increasingly abstract ones, about the natural world
- ▶ Formulate multiple hypotheses and predict multiple outcomes

Planning and conducting

- ▶ Collaboratively and individually plan, select, and use appropriate investigation methods, including field work and lab experiments, to collect reliable data
- ▶ Assess risks and address ethical issues associated with their proposed methods
- ▶ Select and use appropriate equipment, including digital technologies, to systematically and accurately collect and record data

Processing and analyzing data and information

- ▶ Seek and analyze patterns, trends, and connections in data, including describing relationships between variables and identifying inconsistencies
- ▶ Use knowledge of scientific concepts to draw conclusions that are consistent with evidence

Evaluating

- ▶ Evaluate their methods and experimental conditions, including identifying sources of error or uncertainty, confounding variables, and possible alternative explanations and conclusions
- ▶ Describe specific ways to improve their investigation methods and the quality of the data
- ▶ Evaluate the validity of and limitations of a model or analogy in relation to the phenomenon modelled
- ▶ Demonstrate an awareness of assumptions, question information given, and identify bias in their own work and secondary sources
- ▶ Exercise a healthy, informed skepticism and use scientific knowledge and findings to form their own investigations to evaluate claims in secondary sources
- ▶ Consider social, ethical, and environmental implications of the findings from their own and others' investigations
- ▶ Critically analyze the validity of information in secondary sources and evaluate the approaches used to solve problems

Communicating

- ▶ Formulate physical or mental theoretical models to describe a phenomenon
- ▶ Communicate scientific ideas, information, and perhaps a suggested course of action, for a specific purpose and audience constructing evidence-based arguments and using appropriate scientific language, conventions, and representations

Concepts and Content

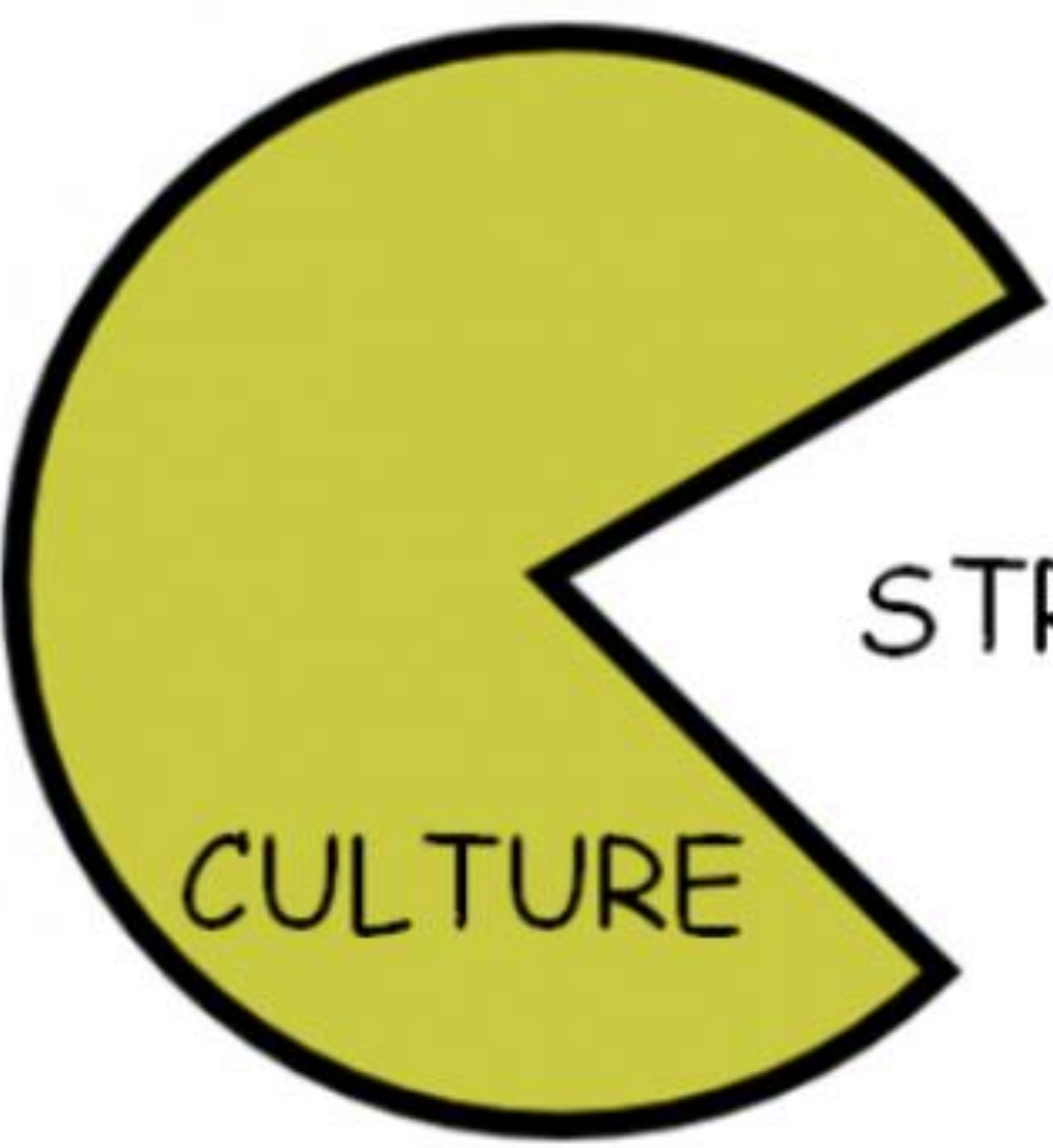
Students will know and understand the following concepts and content

- ◆ the impact of micro-organisms in their body
 - viruses and bacteria
 - microbiomes
 - basic functions of the immune system
 - vaccination
 - antibiotics
- ◆ element properties as organized in the periodic table
- ◆ the fundamental forces
 - gravitation
 - electromagnetism
 - weak nuclear force
 - strong nuclear force
- ◆ the electromagnetic spectrum
 - types of radiation
 - wave-particle duality of photons
 - energy transmission (quanta)
- ◆ the carbon cycle
- ◆ forms of carbon
- ◆ the nitrogen cycle
- ◆ hazardous chemicals
- ◆ the interactions between the lithosphere, atmosphere, biosphere, and hydrosphere

LEARNING ENVIRONMENTS (Nature of Learning)

“The change and transformation is really not about curriculum. It is actually about how we engage students in learning.”





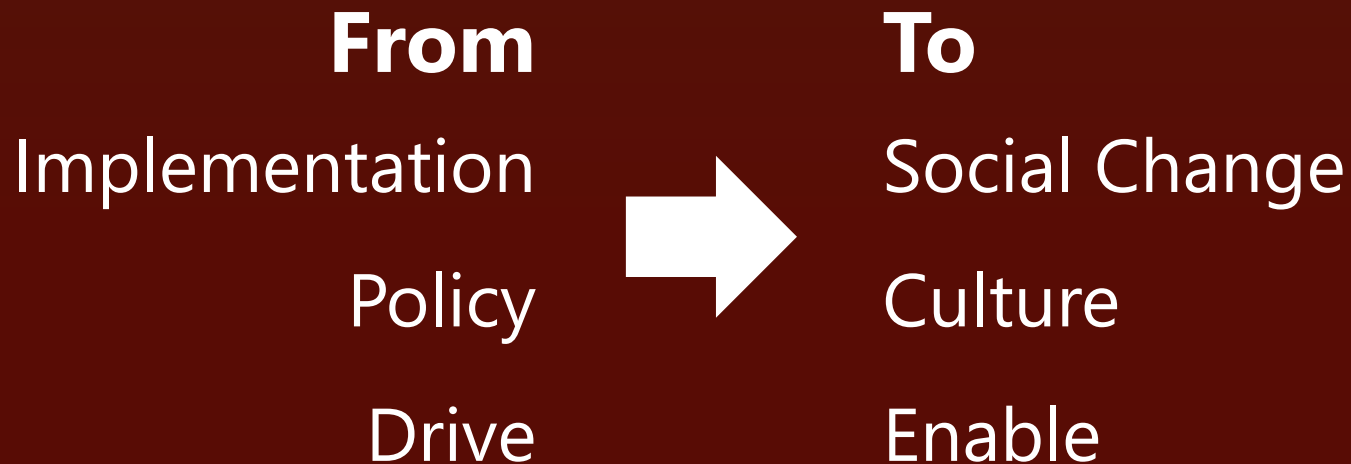
STRATEGY

CULTURE

ORGANIC GROWTH



THEORY OF ACTION



Trust

- Hold the vision
- Trust the process
- Trust each other

SOCIAL LICENSE

- Government as **enabler**, not driver of change
- Change is done **with** people, not to them
- Consultation is **not** enough
- Co-construction both requires and builds **trust**

KEY ELEMENTS FOR EFFECTIVE LEARNING ENVIRONMENTS

- **Learner-centered**: Highly focused on learning but not as an alternative to the key role for teachers
- **Profoundly personalized**: acutely sensitive to individual and group differences and offering tailored feedback
- **Inclusive**: such sensitivity to individual and group differences means they are fundamentally inclusive
- **Social**: Learning is effective in group settings, when learners collaborate, and when there is a connection to community
- **Structured and well-designed**: needs careful design and high professionalism alongside inquiry and autonomous learning

ISTP ON INNOVATION

- Changing pedagogical approaches
- Regrouping adults
- Regrouping learners
- Rescheduling learning

ENGAGING EMERGENCE

- How do we disrupt coherence compassionately?
- How do we engage disruption creatively?
- How do we renew coherence wisely?

Improvement



Transformation





LEARN
COWICHAN

CONTACT INFO

Rodallen16@shaw.ca

@rodroad219