

Learning for Life: A Canadian Experience



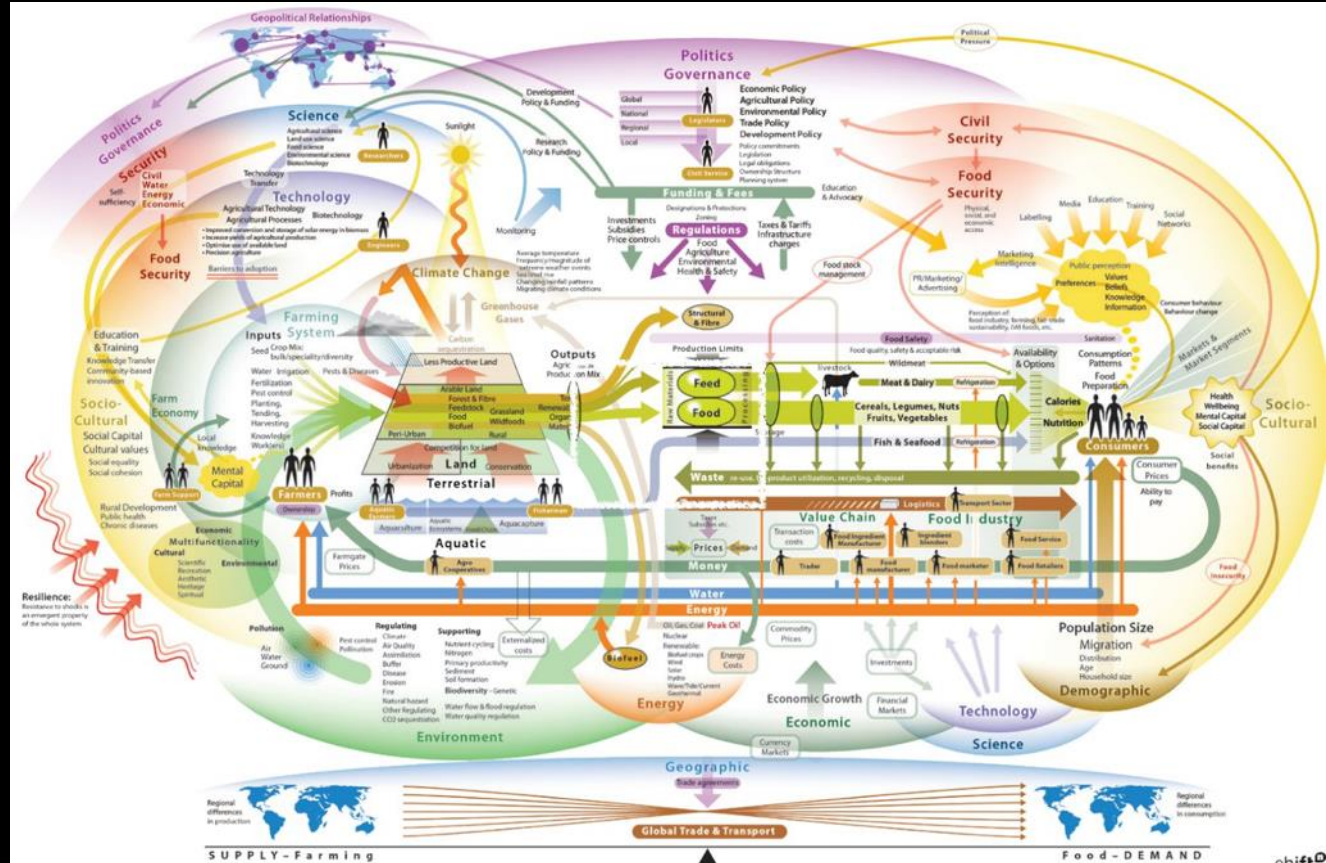
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*Working on the ancestral & traditional territories of the Mississaugas of the Credit,
the Haudenosaunee, the Anishinaabe & the Huron-Wendat*

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Inclusive life-long learning to
benefit everyone

Complex adaptive system in perpetual flux...



Current education
does not & cannot
prepare students
for a lifetime



Image: Survey Centre on America Life

This is the most dangerous time in history of humanity: Stephen Hawking

The 74-year-old Cambridge professor said the world is facing huge environmental and technological challenges and needs to unite and work together to protect the humanity.

PTI | Updated: Dec 04, 2016, 04.46 PM IST



THE ECONOMIC TIMES



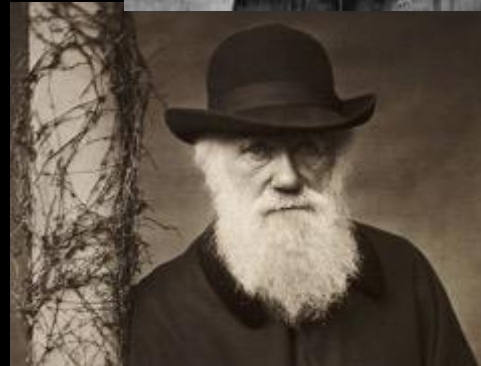
LONDON: In a grim prognosis, renowned British theoretical physicist [Stephen Hawking](#) has warned that the human race today is facing the "most dangerous" time in its history.

Noting that the planet is in crises, the 74-year-old Cambridge professor said the world is facing huge environmental and [technological challenges](#) and needs to unite and work together to protect the humanity.

Education complicit in disparity & global crises



Design of education stuck in 1800's



Preparing students for...

- industrial revolution – replaceable workers
- military strategy – replaceable soldiers



Preparing students to be the machines that the AI machines can replace.

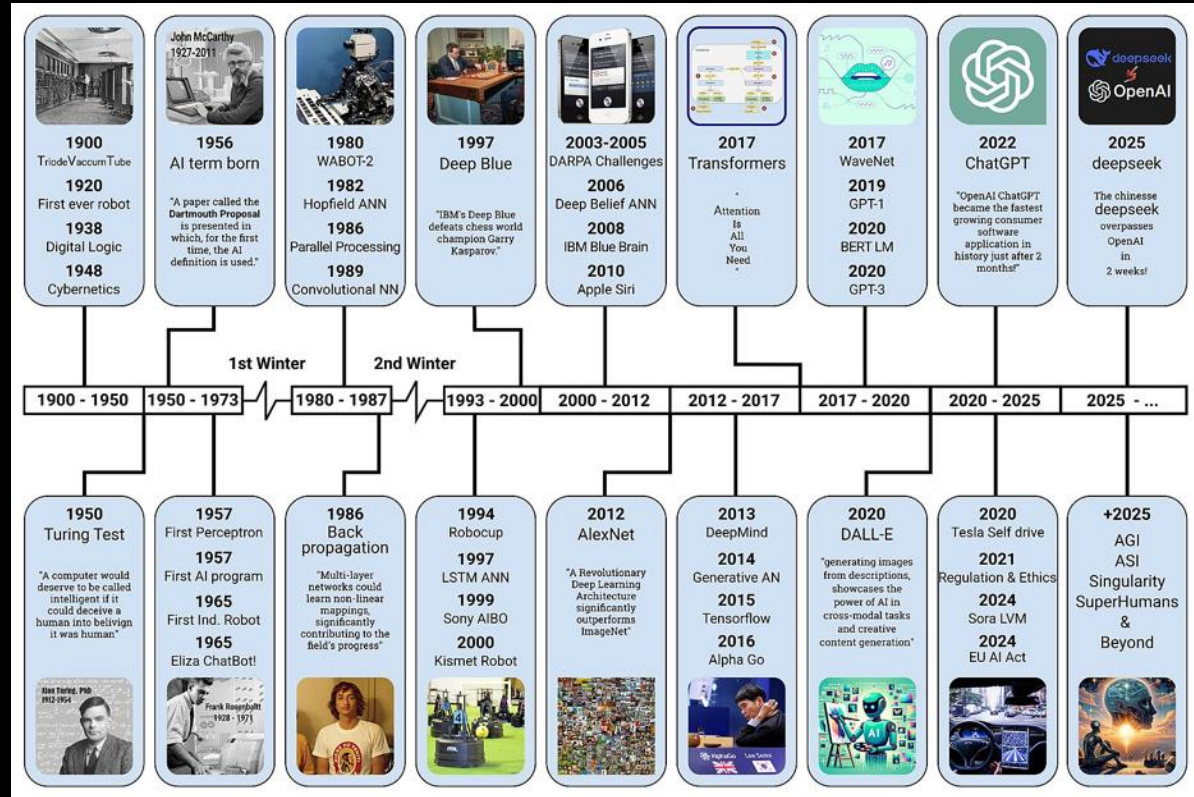


Image: Wikimedia

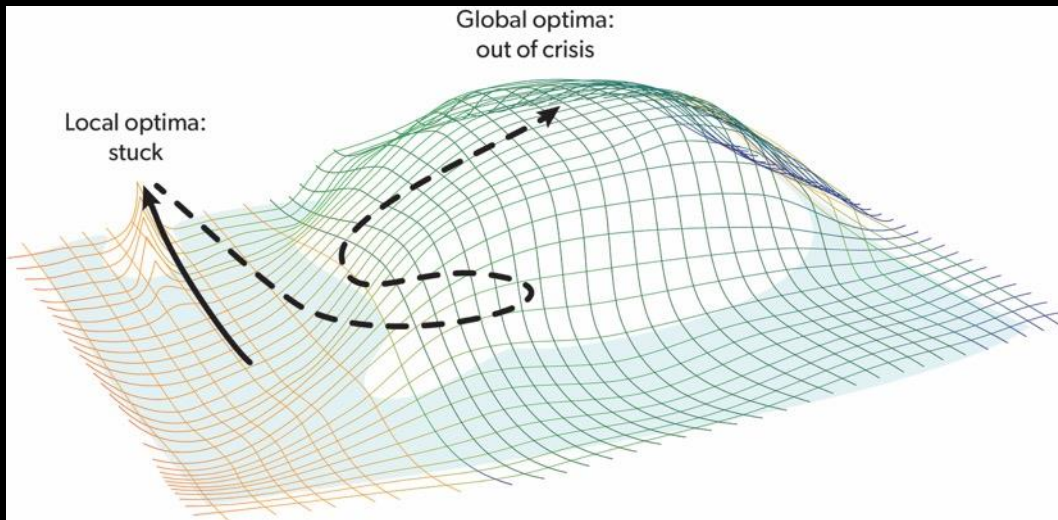
Now using AI to
amplify,
accelerate &
automate past
patterns



Photo: Xinhua news

Stuck on Local Optima

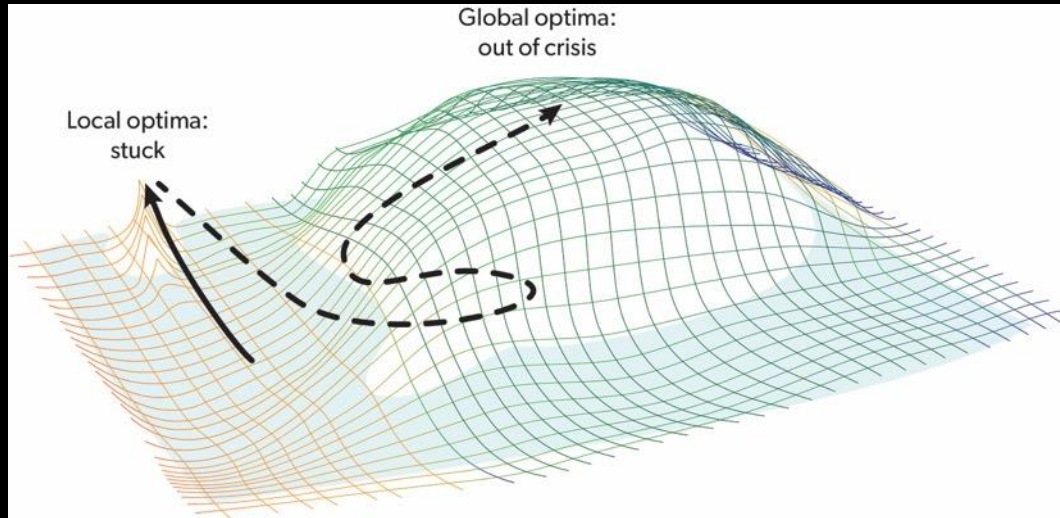
- Hill climbing
- Optimizing the patterns of the past
- Erosion on the slope



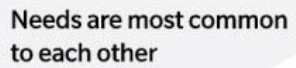
Diversity is our greatest asset,
inclusion is our greatest
challenge

Finding Global Optima

- People closest to bottom are more diverse
- Less invested in the past
- Collectively see more of the terrain



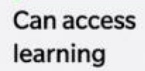
Dataset of Learner Needs



Needs are most common
to each other

Needs are more different
from each other

Needs are most different
from each other

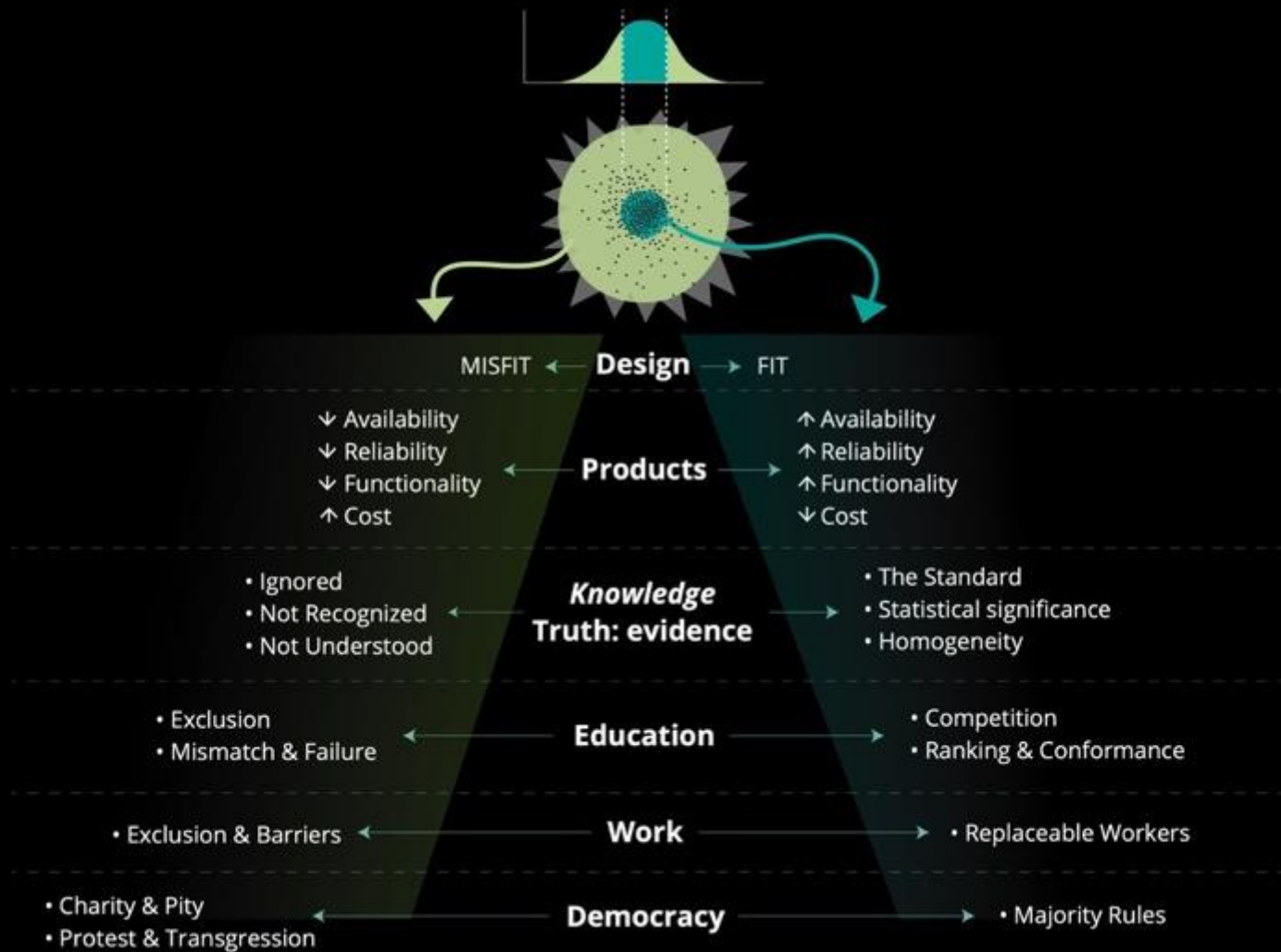


Can access
learning

Can access some of
the learning

Cannot access
learning

Outliers



Expanded choice:
interaction through
texting

Learning resource that can
be viewed on basic phone

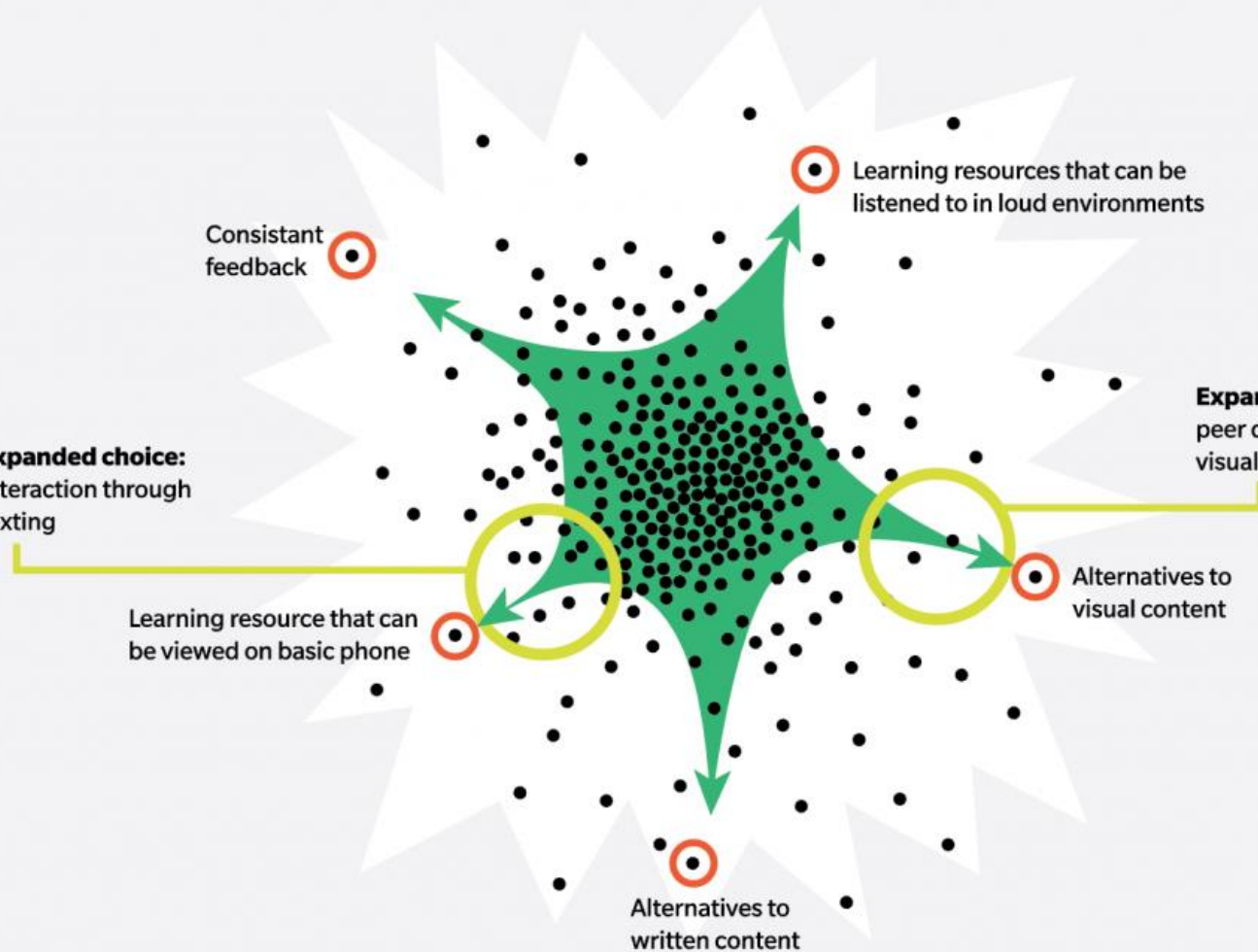
Consistant
feedback

Learning resources that can be
listened to in loud environments

Expanded choice:
peer description of
visuals

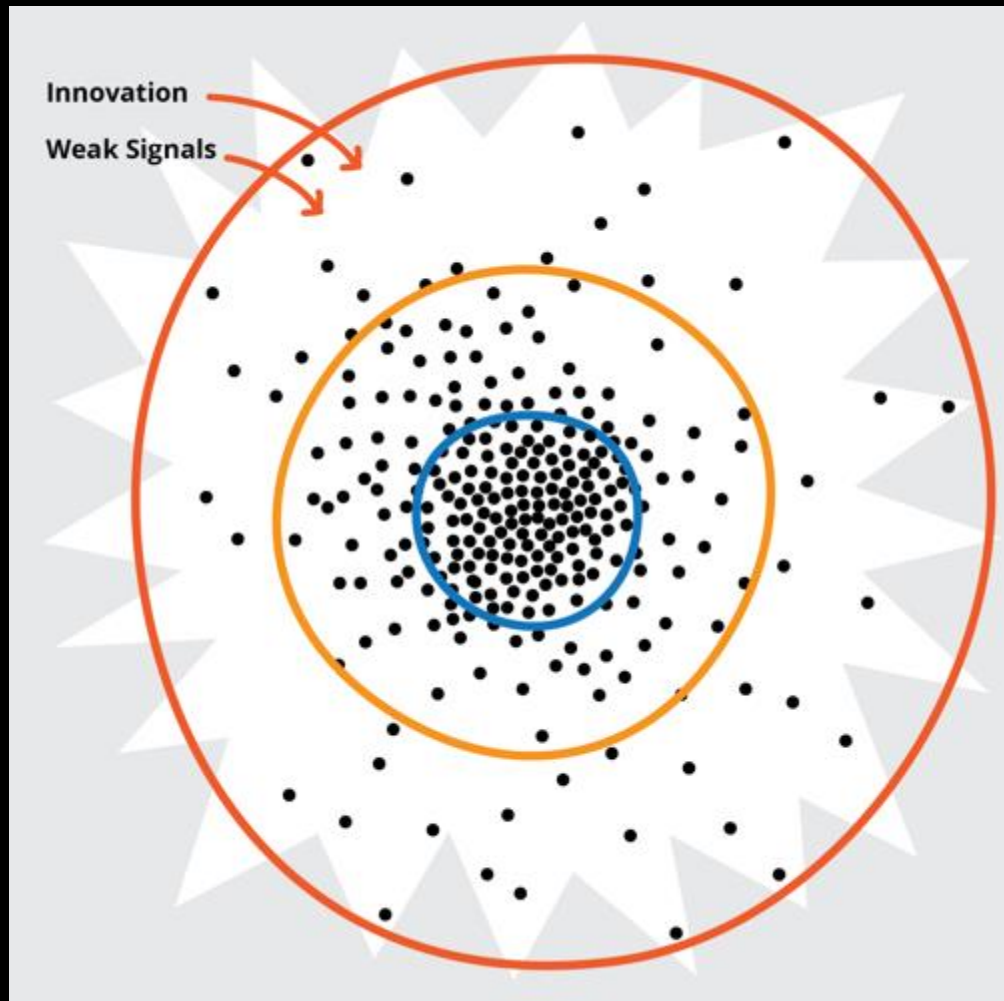
Alternatives to
visual content

Alternatives to
written content



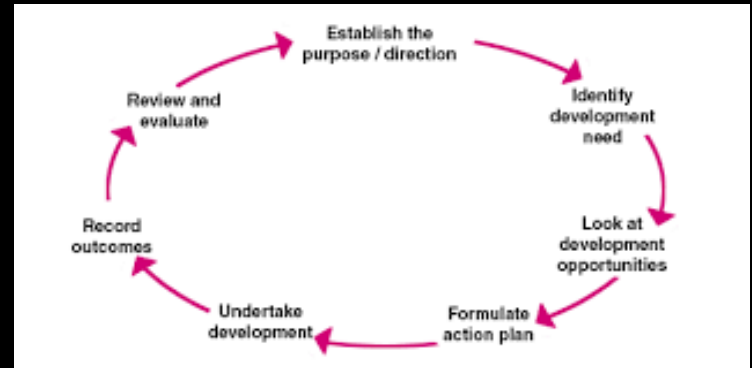
Innovation

Weak Signals



The Canadian Experiment...

From standardization to differentiation: personal learning plans



From competition to collaboration: establishing learning communities



From grade based to
intergenerational:

“Shared Wisdom”



From accommodation to inclusive design:

learning inclusion by doing inclusion



From external direction &
motivation to self-directed and
self-motivated:

deeper learning



Image: Getting Smart

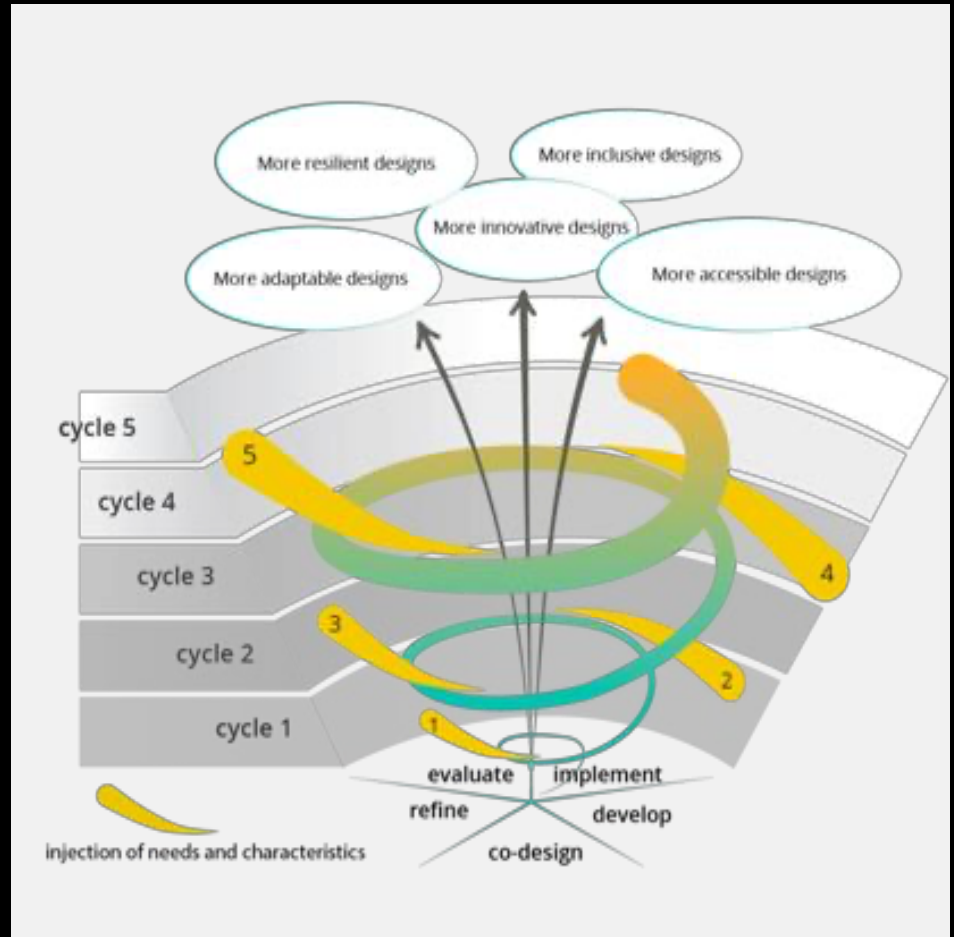
From summative assessment to
formative assessment:

Peer and self-assessment
Mistakes as learning opportunities
Alternative credentials

From conformance to critical
thinking

Unlearning and questioning,
compassionate constructive
critique

From designing for to designing with



Intelligence that works with the edge of our human scatterplot is better able to ..

- Adapt to change & respond to the unexpected
- Detect risk
- Transfer to new contexts
- Results in greater dynamic resilience & longevity
- Will reduce disparity
- May hold the key to our survival

Continuing the conversation:

- <https://accessible.Canada.ca>
- <https://idrc.ocadu.ca>
- <https://wecount.inclusivedesign.ca>
- @juttatrevira
- <https://medium.com/@jutta.trevira>

Supported in part by:



Accessibility Standards
Canada

Normes d'accessibilité
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Funded by Government of
Canada's Innovation, Science
and Economic Development
Canada and Employment and
Social Development Canada

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Funding Acknowledgement

Inclusive Design for Employment Access (IDEA) is supported by generous funding from the Government of Canada's New Frontiers in Research Fund (NFRF) Transformation Stream.

Le Vision Radicale Pour L'Accès Inclusif à l'Emploi (VRAIE) est financé par le fonds Nouvelles frontières en recherche du gouvernement du Canada.



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New Frontiers in Research Fund
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