

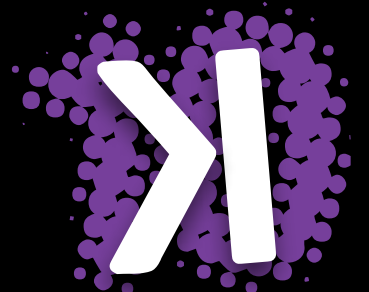
# Let's Bake a Pie

## A Slice of Opportunity for Adult Learners

**Ken Steele**

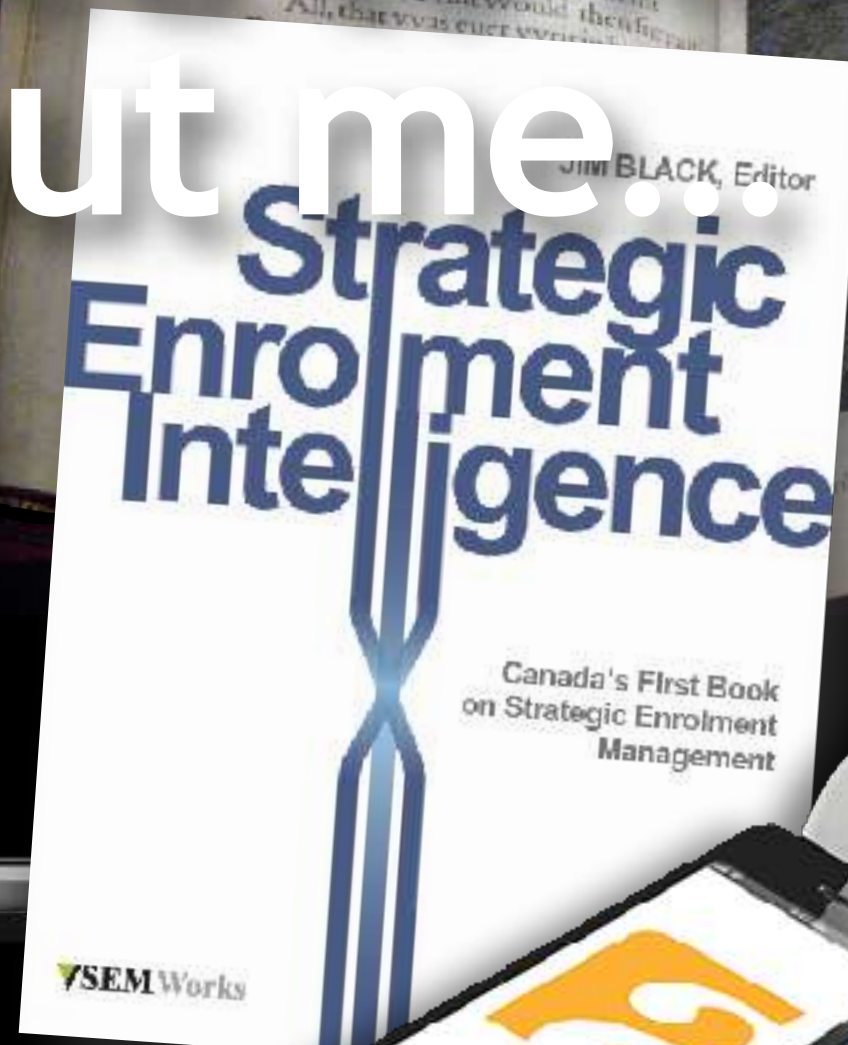
*Chief Futurist, Eduvation Inc.  
Host, Eduvation Circles  
Ten with Ken webcast*

**Foundational Learning Conference** Mar 2025





Just a few things  
you need to know  
about me...







CAEC / CCÉA

Hopefully not  
Half Baked!



# What aspects of CAEC are you directly involved in? (all that apply)

40

Recruiting / Advising Prospective Learners



Test Prep Materials



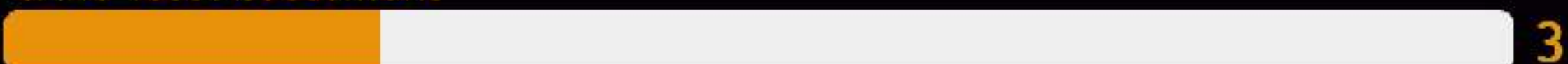
Test Preparation / Training



CAEC Test Administration



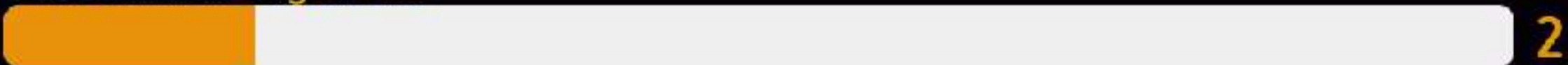
CAEC Test Assessment



HR / PSE Credential Recognition



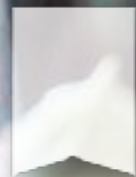
Government Agencies



Other







CAEC / CCÉA



# Setting the Table



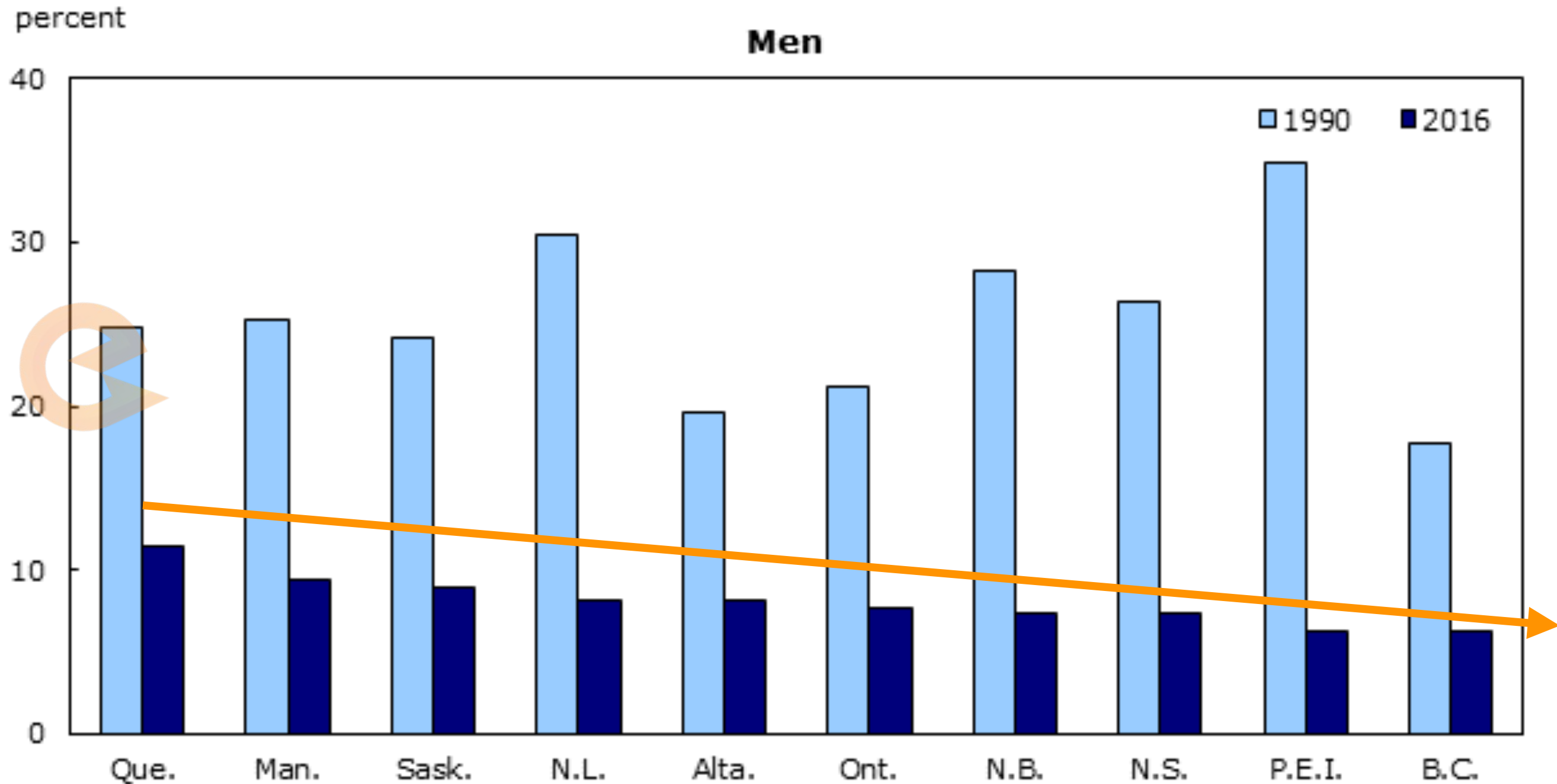
# High School Graduation



**US National Center for Education Statistics 1869-2023**

Public high school AFGR (averaged freshman graduation rate) and total graduates as a ratio of 17-year-old population, selected years

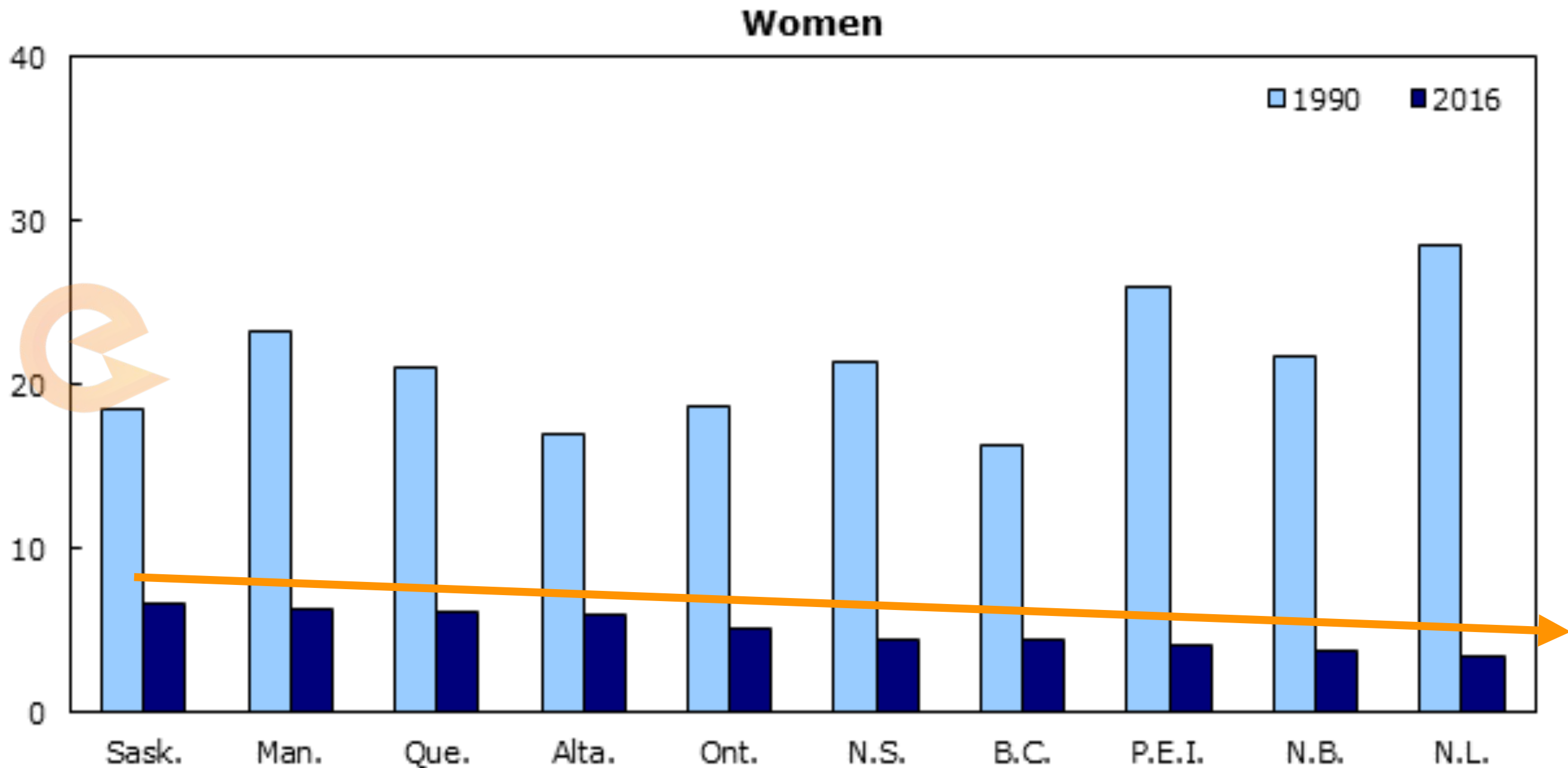
## Less than HS



**Statistics Canada** May 2017

Proportion of men and women aged 25-34 with less than a high school diploma, by province, for 1990 and 2016  
Labour Force Survey, 1990 and 2016

## Less than HS

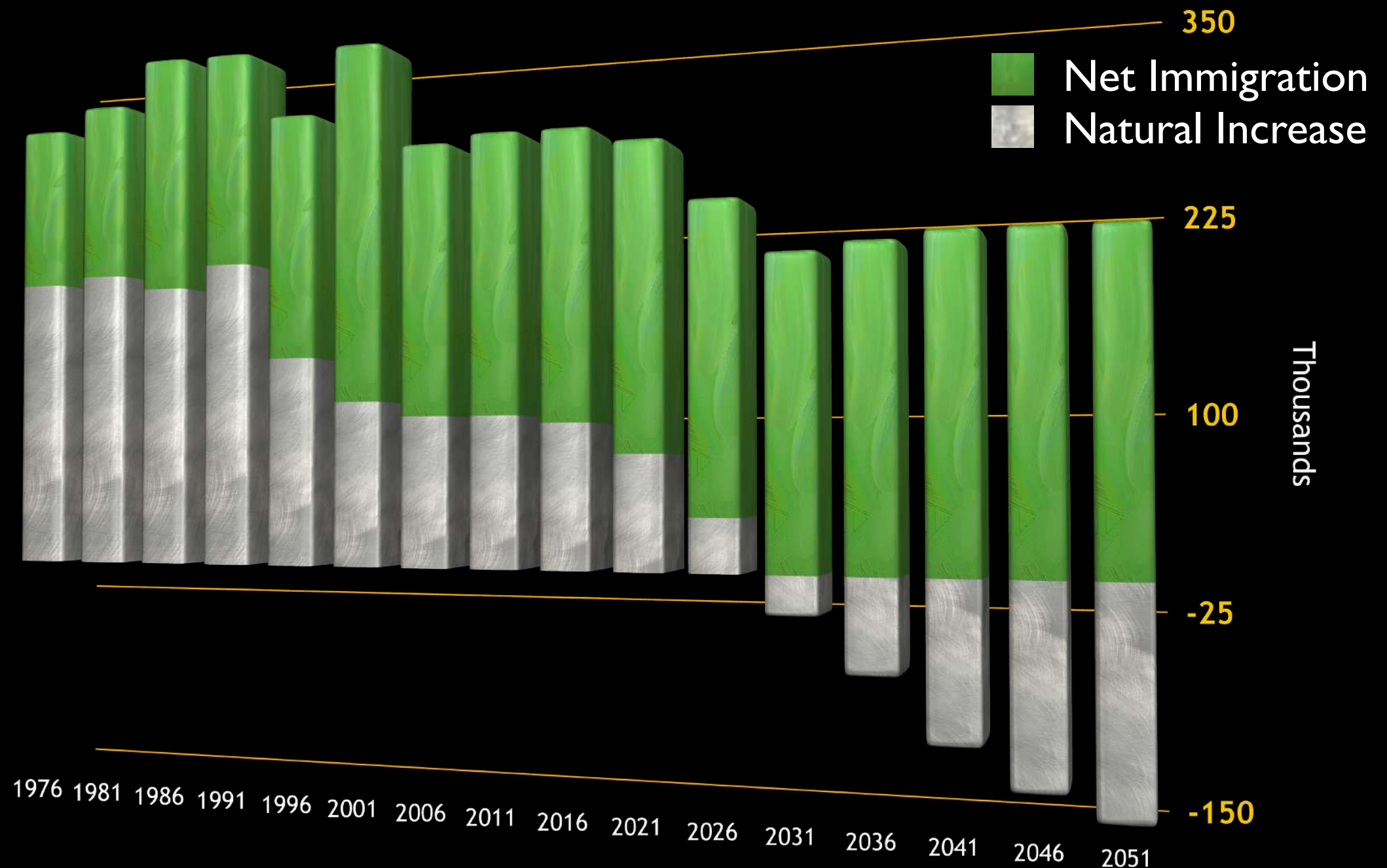


**Statistics Canada** May 2017

Proportion of men and women aged 25-34 with less than a high school diploma, by province, for 1990 and 2016  
Labour Force Survey, 1990 and 2016

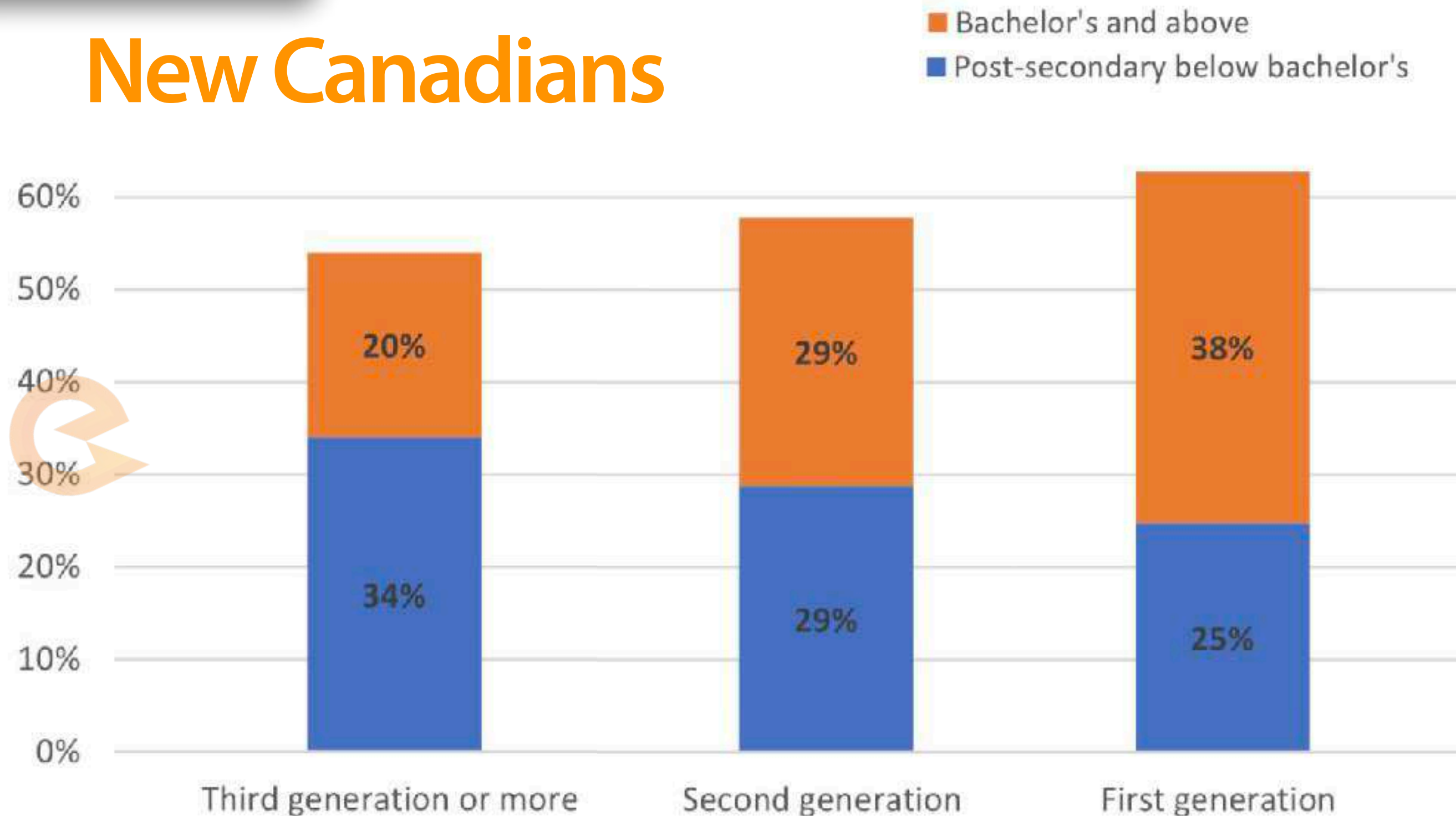


# Canadian Population 1976-2051



Source: HRSDC Strategic Policy Research Directorate, "Looking Ahead: A 10-Year Outlook for the Canadian Labour Market," October 2006. Sources: (1976-2005) Statistics Canada, Annual Demographic Statistics. (2006-2051) HRSDC-SPRD, Labour Market and Skills Forecasting and Analysis Unit, 2006 Reference Scenario.

# New Canadians



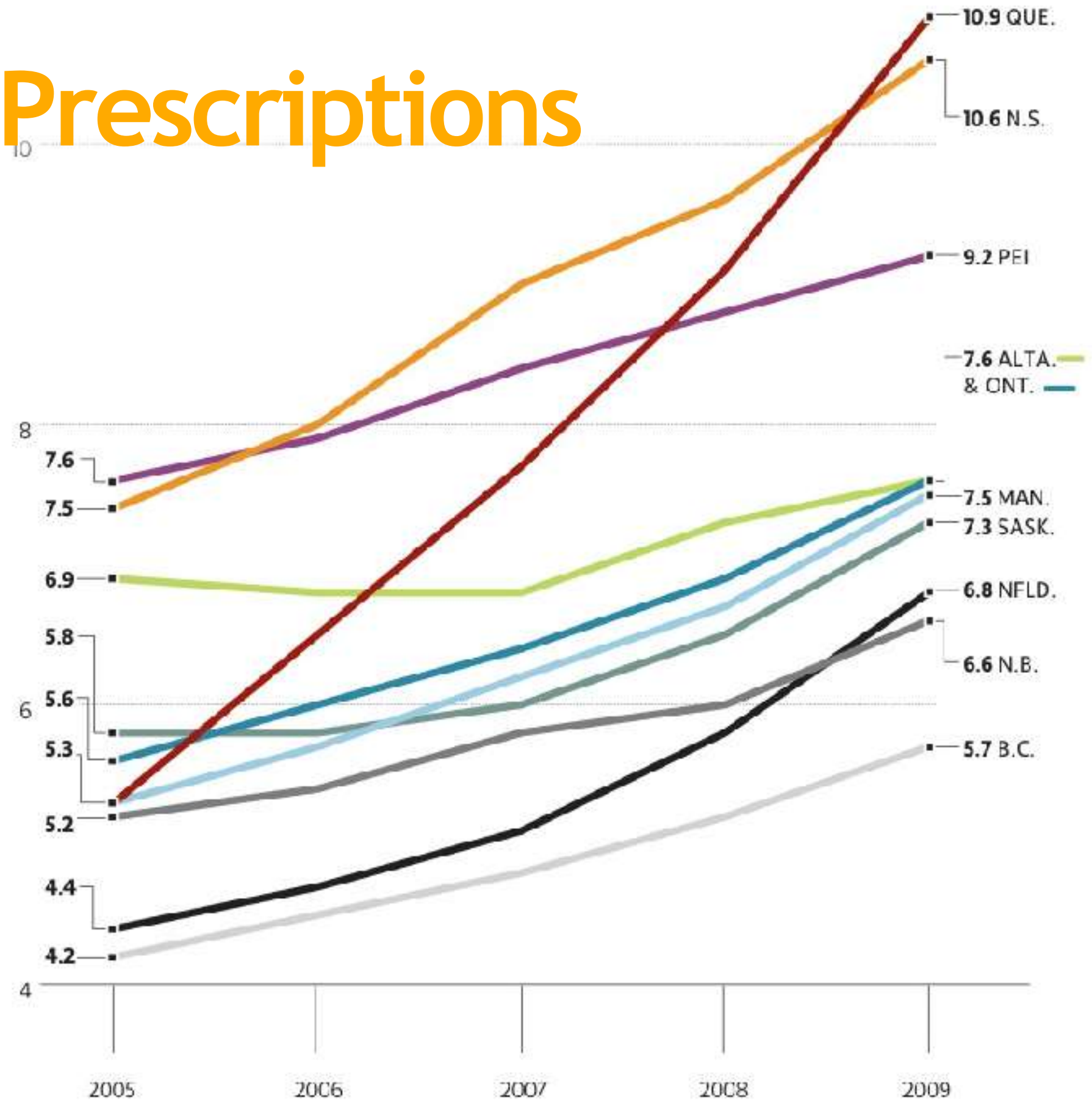
**Statistics Canada** 2021 Census

PSE attainment for those age 25-64

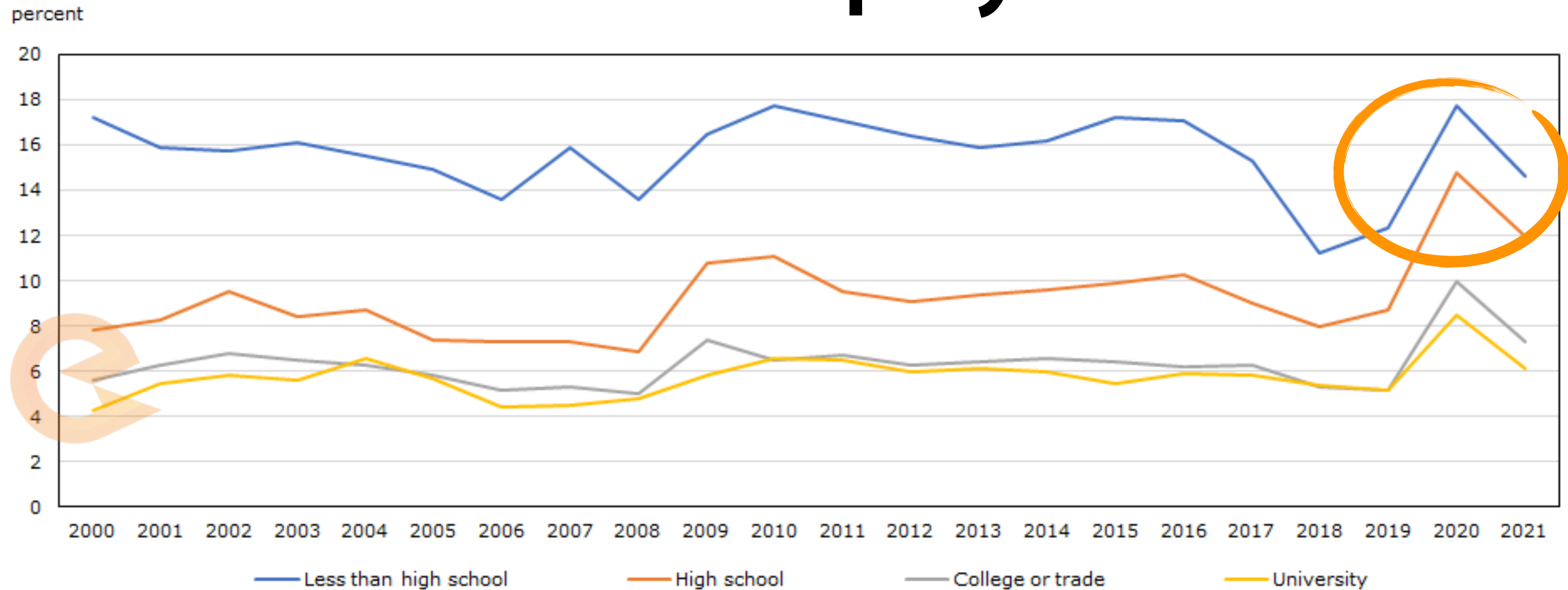
Growing university bias as more and more GTA residents are new Canadians and their children - TWICE as likely to hold bachelor's degrees



# ADHD Prescriptions



# Unemployment Rates



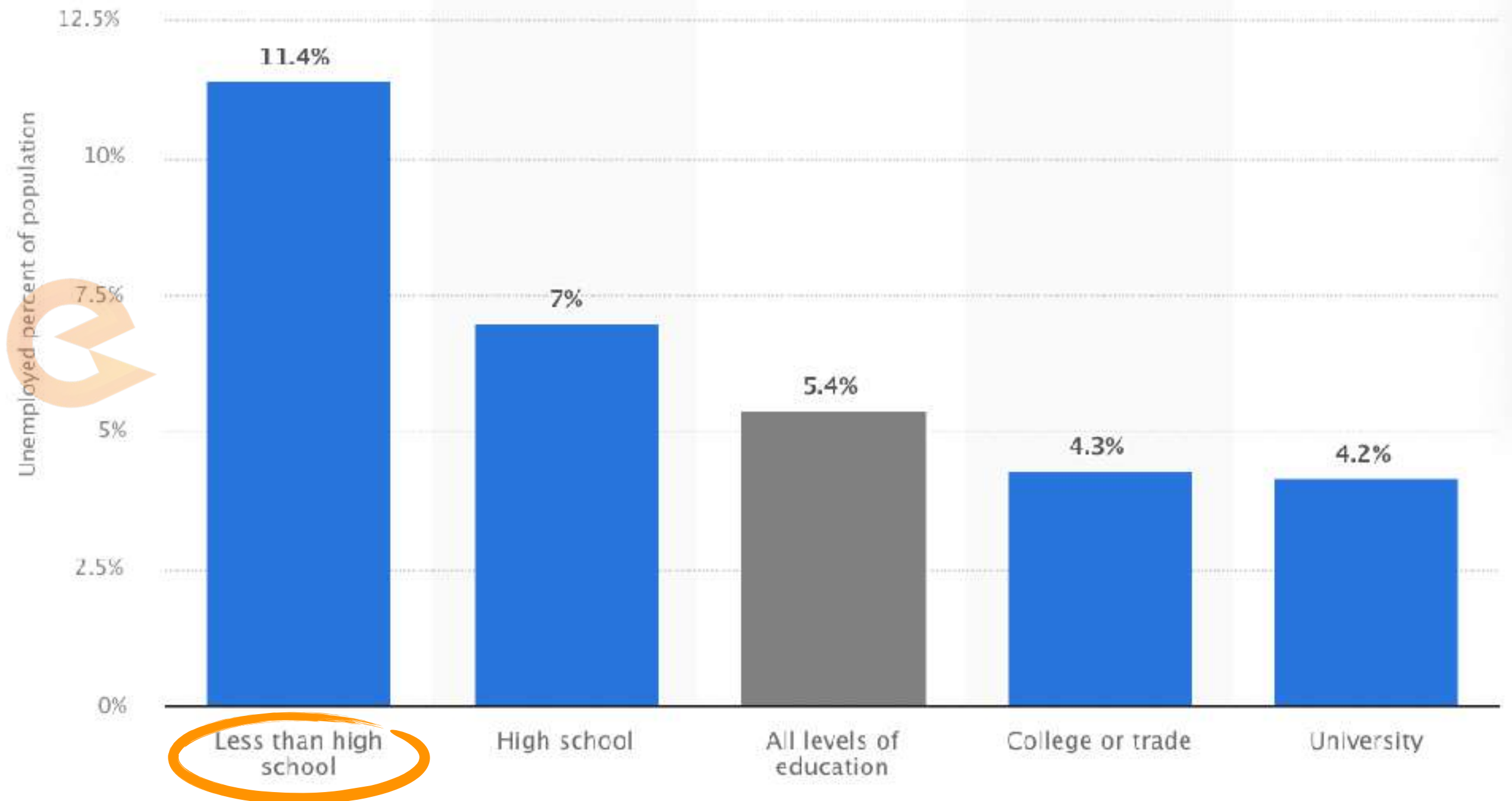
Source: Statistics Canada, table 14-10-0362.

Statistics Canada Jul 2023

Unemployment rates of 25-29-year-olds by highest level of educational attainment, Canada, 2000-2021



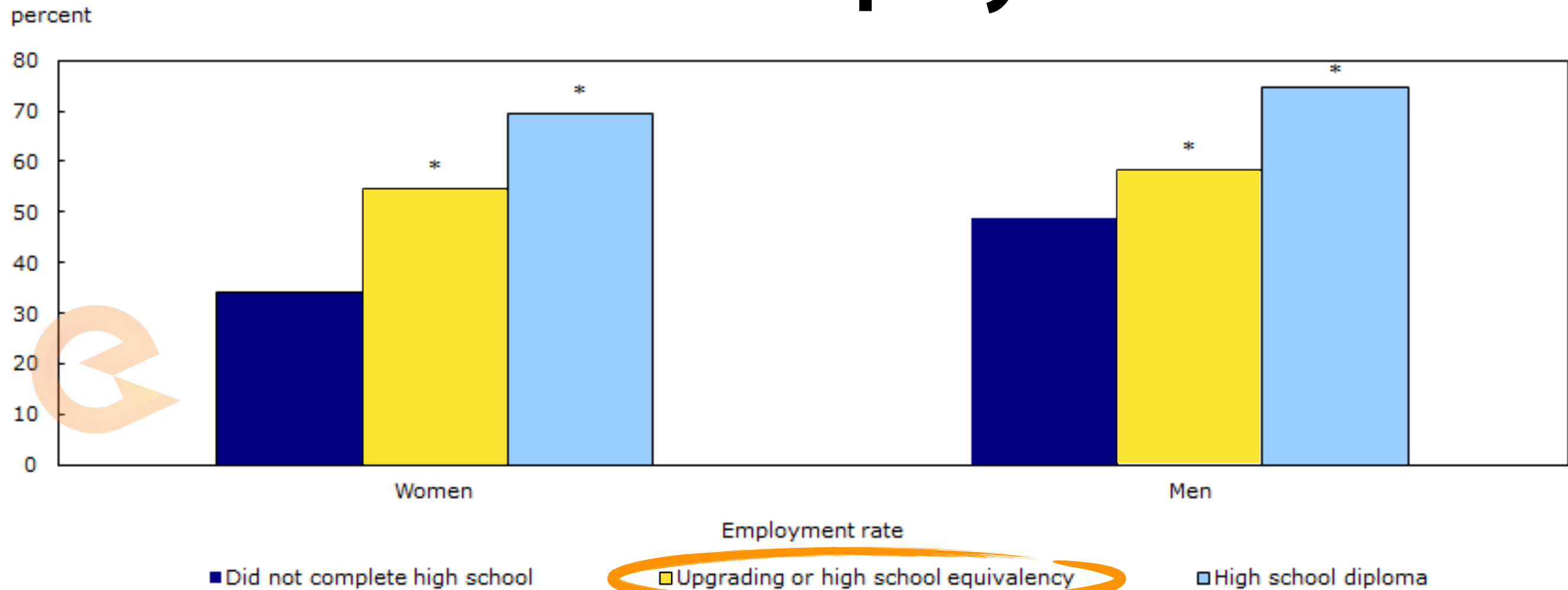
# Unemployment in 2023



Statista Jan 2025

Unemployment rate in Canada in 2023, by education level

## Employment Rates



Statistics Canada Sept 2019

Unemployment rate by high school completion and sex, Indigenous adults aged 25 and over, living off reserve, 2017



# Dual Credits



## Lakeland College 2010

Students earn college and high school credit simultaneously, for free | 10 courses offered in first 3 years | Online: synchronous, asynchronous, or blended | Opportunity for Lakeland to reengineer F2F courses for other students too



# Collegiate Schools



**Northern Lakes College** Dec 2023

NLC partnering with Fort Vermilion School Division and Black Gold School Division to establish “collegiate schools”  
Specialized programming, facilities, experiential learning, work experience, dual credit or bridging to PSE | Mobile trades lab  
NLC already has dual credit programs with 25 Alberta school divisions | Power Engineering, Edu Asst, Trades, Healthcare



# Close the Gap



**Pathways to Education** Oct 2021

**:30 sec**

Non-profit, promotes HS completion / PSE participation thru wrap-around financial, social, academic and counselling support.  
"There is a growing gap between students from low-income communities and their education."



## How would you rank these factors driving higher HS completion rates?

18

Fewer Unskilled Labour Opportunities



1st

Learning Disability Supports



2nd

Applied / College Programs in HS



3rd

Greater Parental Influence



4th

Greater Peer Pressure



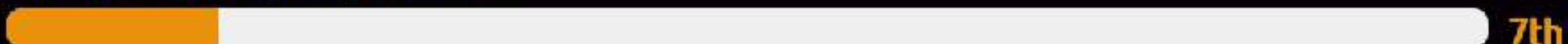
5th

ADHD Medications



6th

Truancy Laws / Age Requirements



7th



# Licensed Testing

**TOWES**  
CANADIAN ESSENTIAL CREDENTIAL  
**RESULTS REPORT**

Date: 11/13/2007  
Test: GL + G Series  
Name: Jane K. Taylor

These Are Your Scores:	Reading Text	Document Use	Numeracy
	2 (3)	2	4

**Congratulations!** You completed TOWES, a valid and reliable assessment of workplace skills. TOWES is designed to assess the skills needed to be successful in the workplace. TOWES is a valid and reliable assessment of workplace skills.

**What the Scores Mean:**

- Reading Text:** This score indicates how well you understand and use written information. It includes skills such as reading, understanding, and using written information.
- Document Use:** This score indicates how well you understand and use written information. It includes skills such as reading, understanding, and using written information.
- Numeracy:** This score indicates how well you understand and use numerical information. It includes skills such as reading, understanding, and using numerical information.

**How the Scores work:**

The TOWES test is a valid and reliable assessment of workplace skills. It is designed to assess the skills needed to be successful in the workplace. TOWES is a valid and reliable assessment of workplace skills.

**Additional Information:**

The TOWES test is a valid and reliable assessment of workplace skills. It is designed to assess the skills needed to be successful in the workplace. TOWES is a valid and reliable assessment of workplace skills.

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The TOWES test is a valid and reliable assessment of workplace skills. It is designed to assess the skills needed to be successful in the workplace. TOWES is a valid and reliable assessment of workplace skills.

**Bow Valley College Since 1998**

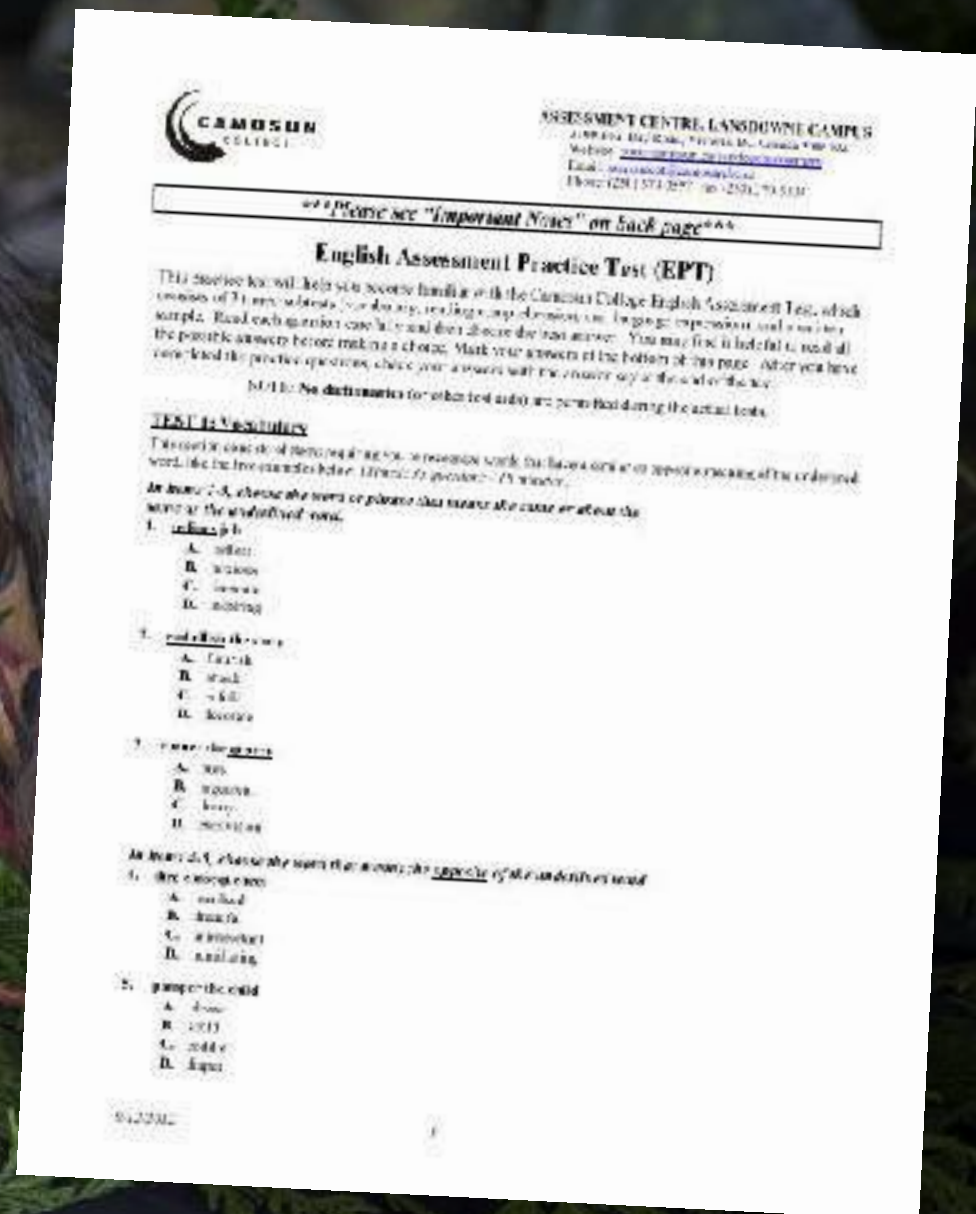
Test of Workplace Essential Skills (TOWES) | Investment in research | Only continuously ongoing commercialization in Alberta  
 Canadian life/work context to test reading, numeracy | Results align to HRSDC's NOCS and Essential Skills Profiles  
 BVC sells the test, instructional resources, consulting and PD | >100,000 tests | Joint venture with BC Construction Sector Council



# Decolonizing English Assessments



<https://youtu.be/CLVYgAmZuxA>



**Camosun College** Apr 2024

National “Indigenizing English Placement Assessment” steering committee | More inclusive, culturally appropriate, equitable  
Existing tool was US-based, “contains language that may trigger trauma, and overlooks... storytelling, land-based issues, family values.”  
Reflecting Indigenous worldviews and cultures | New software to allow video, other storytelling, multi-modal tech

<https://camosun.ca/news/camosun-launches-national-initiative-decolonize-english-assessment>

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# Trades in Prison



**Kwantlen Polytechnic University** Sep 2024

Partnership with Fraser Regional Correctional Centre | Formal Welding certification program for inmates | M-F classes, 10-12 students  
Tools and supplies from KPU's 6-month course, prepare inmates to take the Canadian Welding Bureau test | There's a waitlist  
"When they leave here, they can actually get a job where they can make enough money to... get back on their feet."





CAEC / CCÉA

# Selling Like Hot Cakes



# Virtual Learning Strategy



### Being the Future

Provide sector supports to drive a continued co-existence with hybrid learning

**Blended/Hybrid**  
is the future



### Being a lifelong learner

Support education and retraining, reskilling and upskilling

**Lifelong Learning**

Short-Cycle  
Training

**PLAR**

Microcredentials

Flexible Delivery



### Being a global leader

Realize international markets for Made-in-Ontario online PSE and educational technology

International  
Recruitment

Overseas  
Initiatives

Online Learning

**Private-Sector  
EdTech**



### Collaborative

The VLS will prioritize collaboration for sector transformation that impacts all institutions

Collaborations  
between  
institutions and  
across sectors



### Digital by Design

The VLS supports the development of online content and supports that are digital by design

**Digital first**

## Ontario Virtual Learning Strategy Jan 2021

\$50M challenge fund, administered by eCampus Ontario | Full disclosure: I sit on the Virtual Learning Advisory Committee (VLAC)  
Meeting immediate needs of public PSEs in response to COVID19, but also investing for a longer-term future



# 9,000 ESL Positions Cut



## BC Government Mar 2014

Canada-BC Immigration Agreement cancelled, federal funding for ESL eliminated | Feds to award contracts directly instead  
\$17 M which paid for >9,000 ESL students to learn English tuition-free | Students launch “ESL Matters” protest campaign  
BC commits \$17.2 M to one-time transition funding



50  
YEARS

VANCOUVER  
COMMUNITY  
COLLEGE

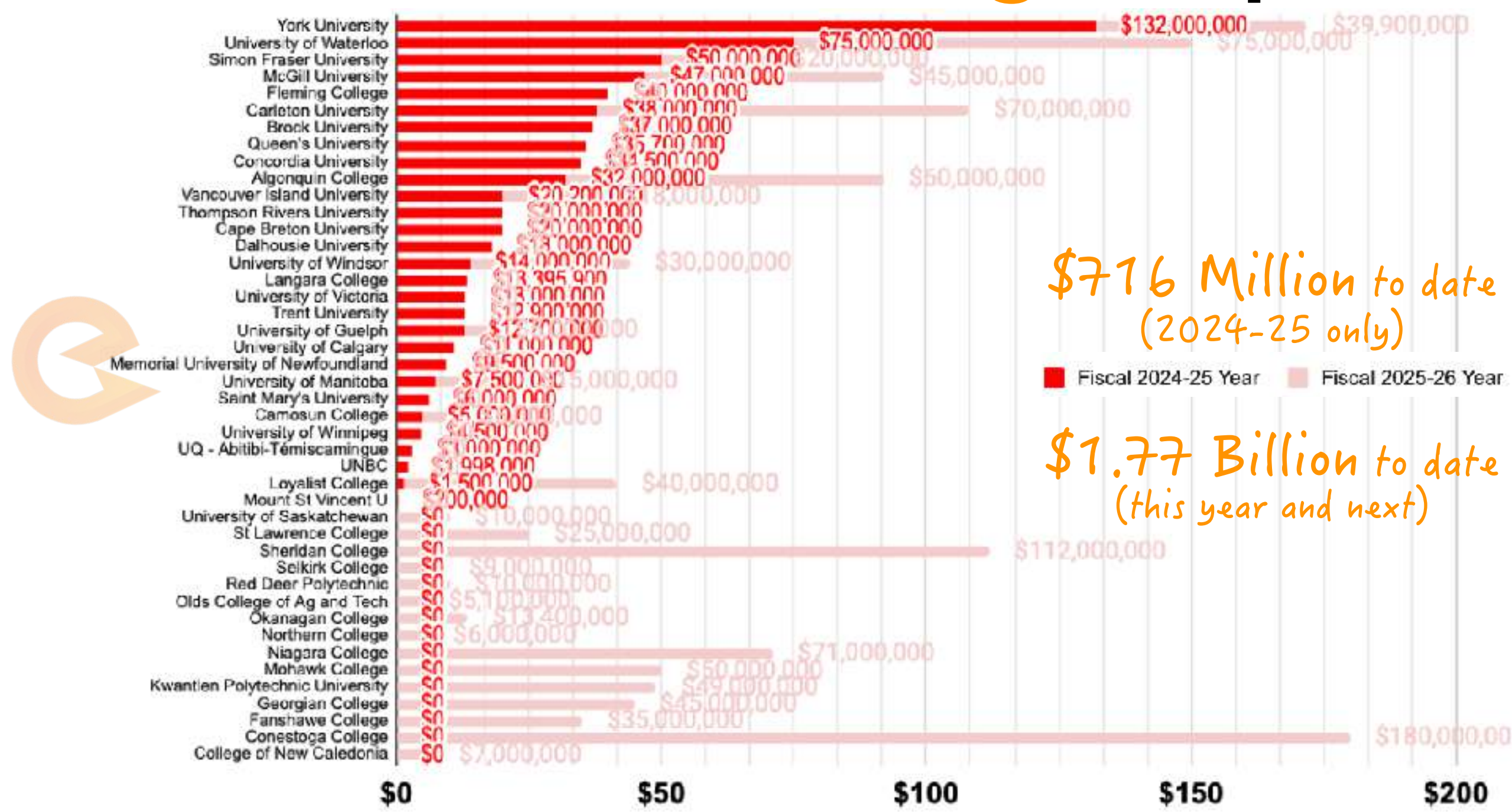
\$8 million  
in Budget Cuts

**Vancouver Community College** Jun 2014

Severe cuts to ESL after Feds cancel Canada-BC Immigration Agreement | VCC had delivered 46% of ESL in the province  
ESL was 25% of VCC's services | 45 instructors let go, 22 took early retirement, another 70 to be laid off



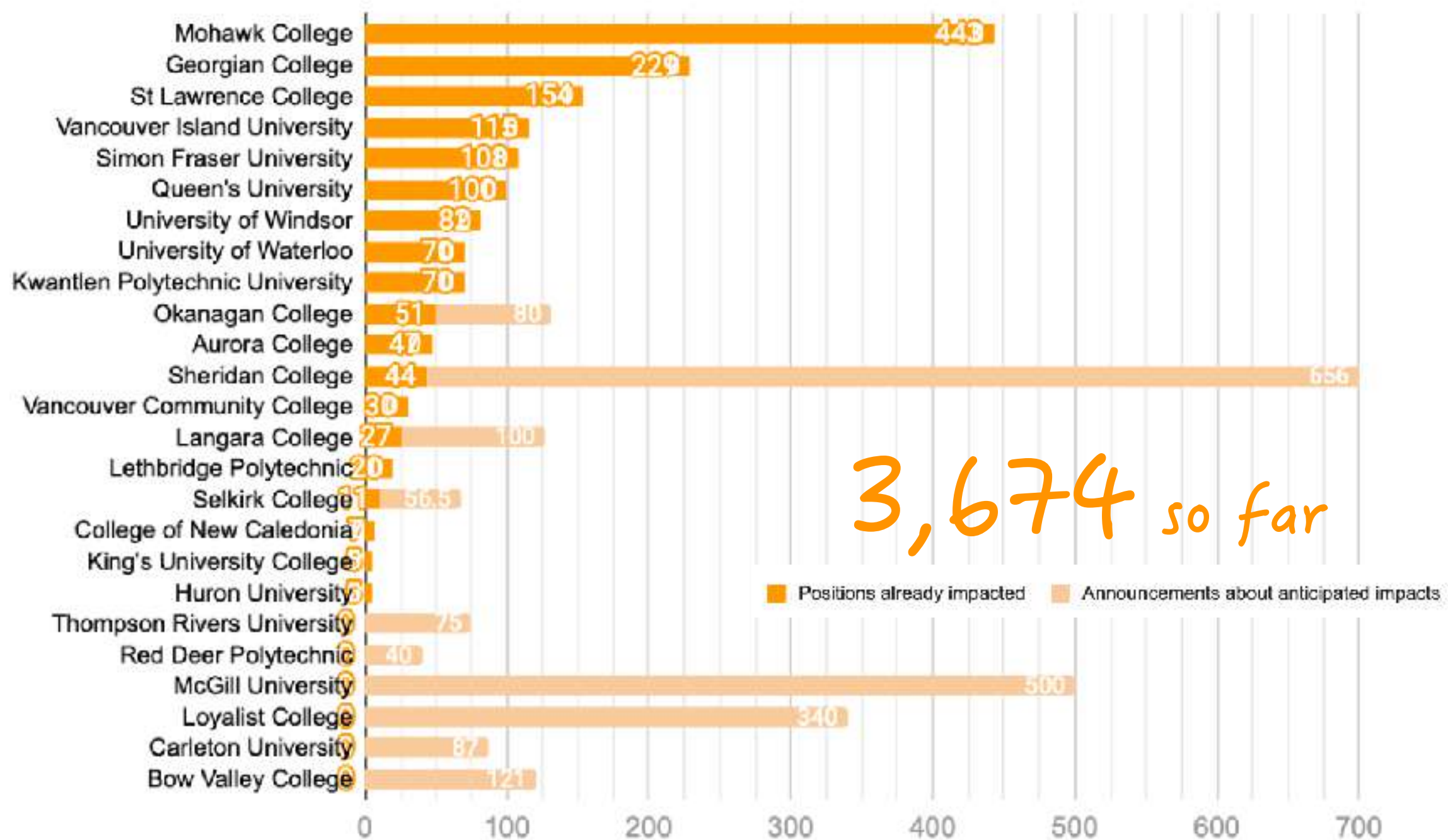
# Budget Impacts



Eduvation Inc. Mar 2025

Eduvation is tracking projected deficits, lost revenue, and budgets cuts - in a real-time tracker | Public announcements, media reports  
Generally running 3-10% of total budget

# Positions Eliminated



**Eduvation Inc. Mar 2025**

Tracking layoffs, attrition, early retirements, etc - "positions eliminated" - in a real-time tracker | Public announcements, media reports  
 Generally does NOT include outsourced jobs, non-renewed contracts, or thousands of positions at PCPP campuses  
 Sheridan, Mohawk, Okanagan trendline suggests roughly **1 job cut** for every **5-8** international students lost

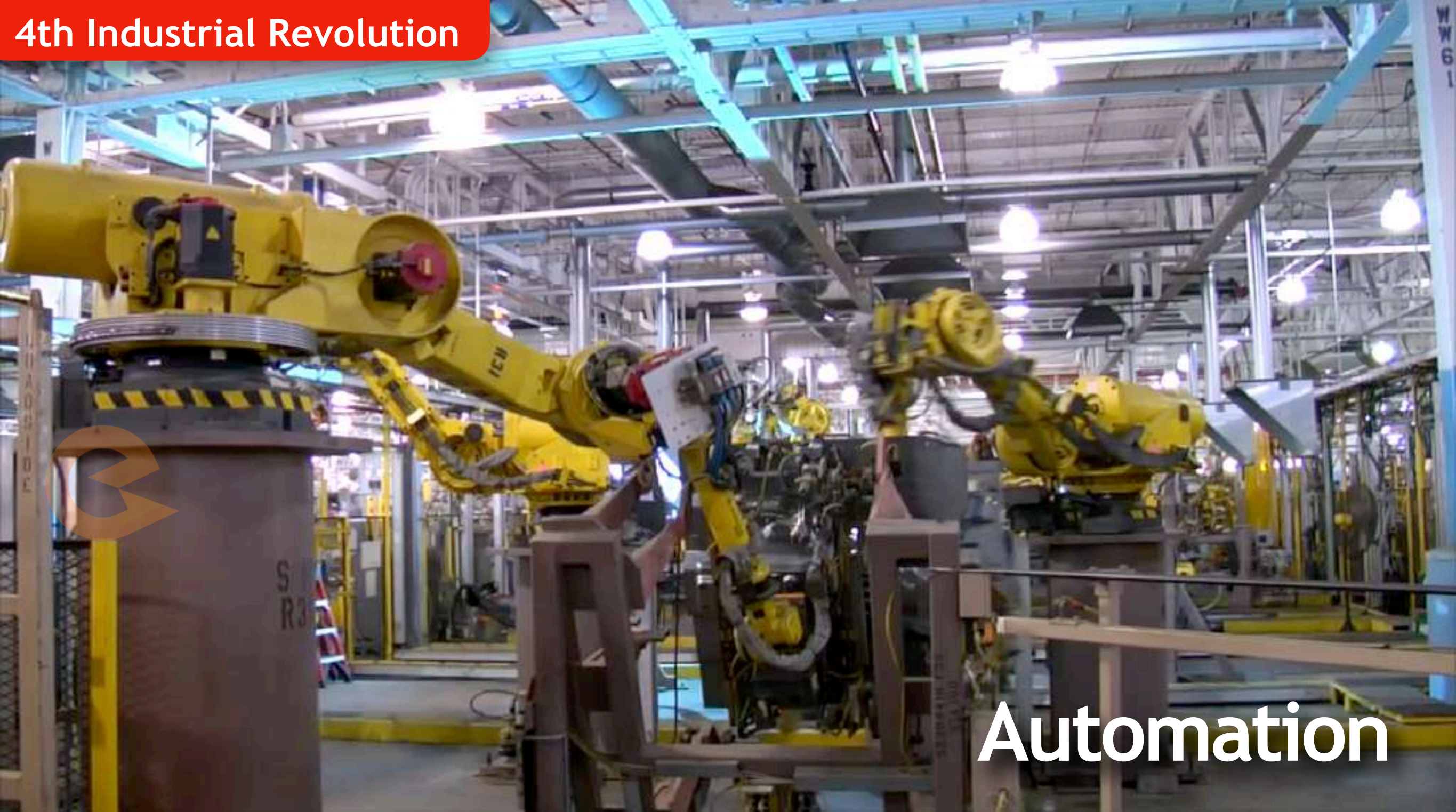


Trade Wars spark **Recession**

**Canadian Jobs Lost** in Automotive,  
Manufacturing, Resource Extraction

Higher unemployment has historically  
**driven demand for GED**





## Automation

### Eduvation Jun 2019

Assembly line | Semi-Autonomous Mason SAM 100 lays 3,000 bricks per day, 3x a human | Cashier Bots | Fully Autonomous Vehicles | San Francisco Creator Restaurant grind-to-order burgers (Jul 2018) | Moley Robotics autonomous kitchen (2014) | Baxter | Softbank Robotics Pepper can deduce emotion (Jun 2014) | Boston Dynamics Atlas | AIST Japan's HRP-5P Drywalling Robot (Oct 2018) | IBM Watson does cancer diagnosis at Sloan-Kettering Memorial Hospital | Google Assistant | Xinhua News Agency (Nov 2018) 2:30 min



# Bye Bye Gig Workers



**Tesla Motors** Oct 2024

:50 sec

Autonomous point-to-point transport unveiled on closed course at Universal Studios | Can buy, lease, or rent short-term  
Like a 2-passenger Uber, but remembers your climate/seating/music preferences | Wireless in-ground charging  
NO steering wheel or rear window, couch-like seats, large entertainment screen | Gold as a futuristic version of a Yellow cab

“**Stop** saying  
kids should  
**learn to code.**”

AI will **kill**  
coding.”

**Jensen Huang**  
CEO, Nvidia



**World Government Summit Feb 2024**

Even at this early stage of AI development, programming is no longer a vital skill | “Everybody in the world is now a programmer.”

Like DTP revolution | Programming languages can be replaced by natural human language prompts

Cited by Mark Tyson on *tom's Hardware*



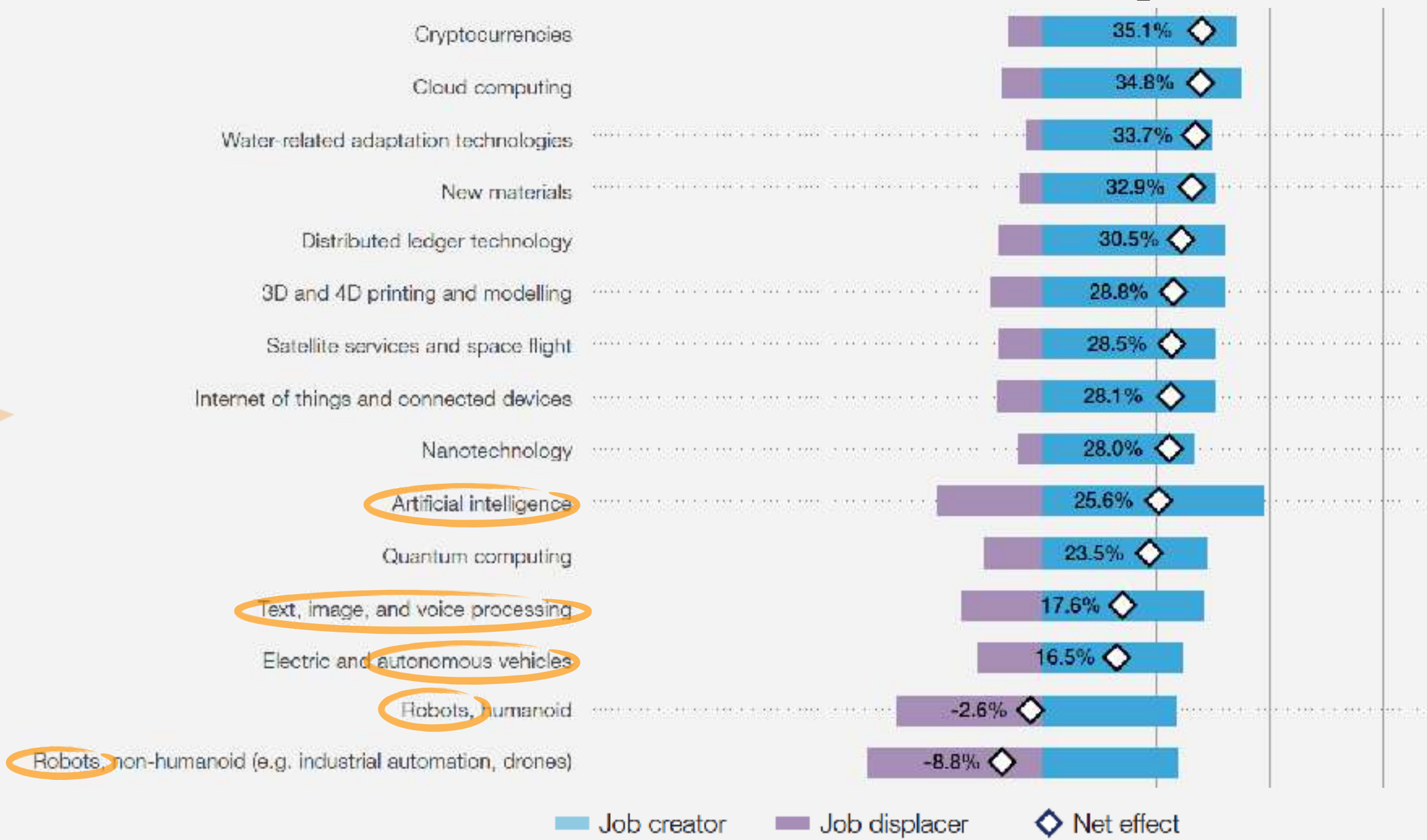
“Up to **45%**  
of American  
jobs will be  
replaced by  
**AI** by 2045.”



**Nick Bostrom**

*Director, Future of Humanity Institute,  
Oxford University*

# Tech Impacts



World Economic Forum May 2023

Expected impact of tech adoption on jobs, 2023-27 | Share of orgs surveyed that expect each trend to create or displace jobs (neutral omitted)  
Future of Jobs Report 2023 | 4th edition, 803 companies in 27 industry clusters





CAEC / CCÉA

# Icing on the Cake



The screenshot displays a complex digital interface for the CAEC / CCÉA platform. It is divided into several numbered sections (1-10) indicating different components:

- 1**: Navigation bar at the top.
- 2**: Left sidebar menu with options like 'Online Shopping', 'Questions', and 'Favourites'.
- 3**: Main content area showing a recipe for 'German Potato Salad' with a photo and description.
- 4**: Question 14, which asks to arrange the steps of the recipe in the correct order.
- 5**: Question 14 (continued) showing the steps to be arranged.
- 6**: Question 14 (continued) showing the steps to be arranged.
- 7**: Question 14 (continued) showing the steps to be arranged.
- 8**: Question 14 (continued) showing the steps to be arranged.
- 9**: Question 14 (continued) showing the steps to be arranged.
- 10**: Question 14 (continued) showing the steps to be arranged.

The interface includes a top navigation bar, a left sidebar menu, a main content area, and a right sidebar with navigation controls. The main content area displays a recipe for 'German Potato Salad' with a photo and a description. The right sidebar contains a question titled 'Question 14' and a list of steps to be arranged in the correct order.

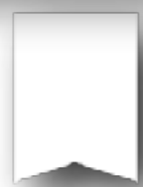
AlphaPlus Oct 2024

Instructors need to prepare candidates to use the CAEC digital platform | Reading on-screen, navigating the interface

13 kinds of multiple-choice questions | Some users will experience excessive cognitive load

"Try the Tools" section attempts to introduce icons, functions | A single workshop might not be sufficient for some learners





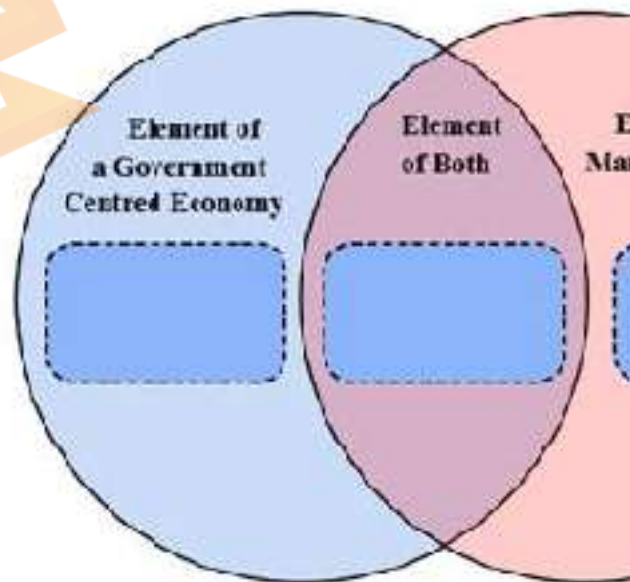
If the pattern continues, then how many more grey tiles will be tiling the floor?

12

15

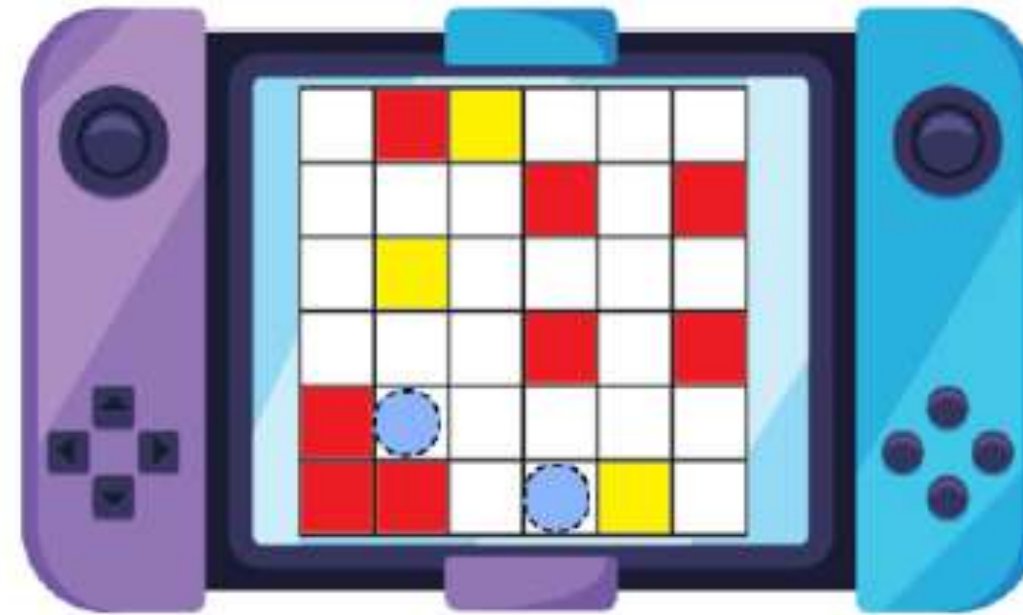
Select four details that are correctly reflected in the source.  
Place the labels in the appropriate target in the diagram.

Features of Economic System



A partially completed 3-In-A-Row puzzle is shown below.

When the puzzle is completed correctly, select the colours that will be in the blue spaces.



Refer to a government action that would increase



ing to the recipe

First step of the recipe

↓

↓

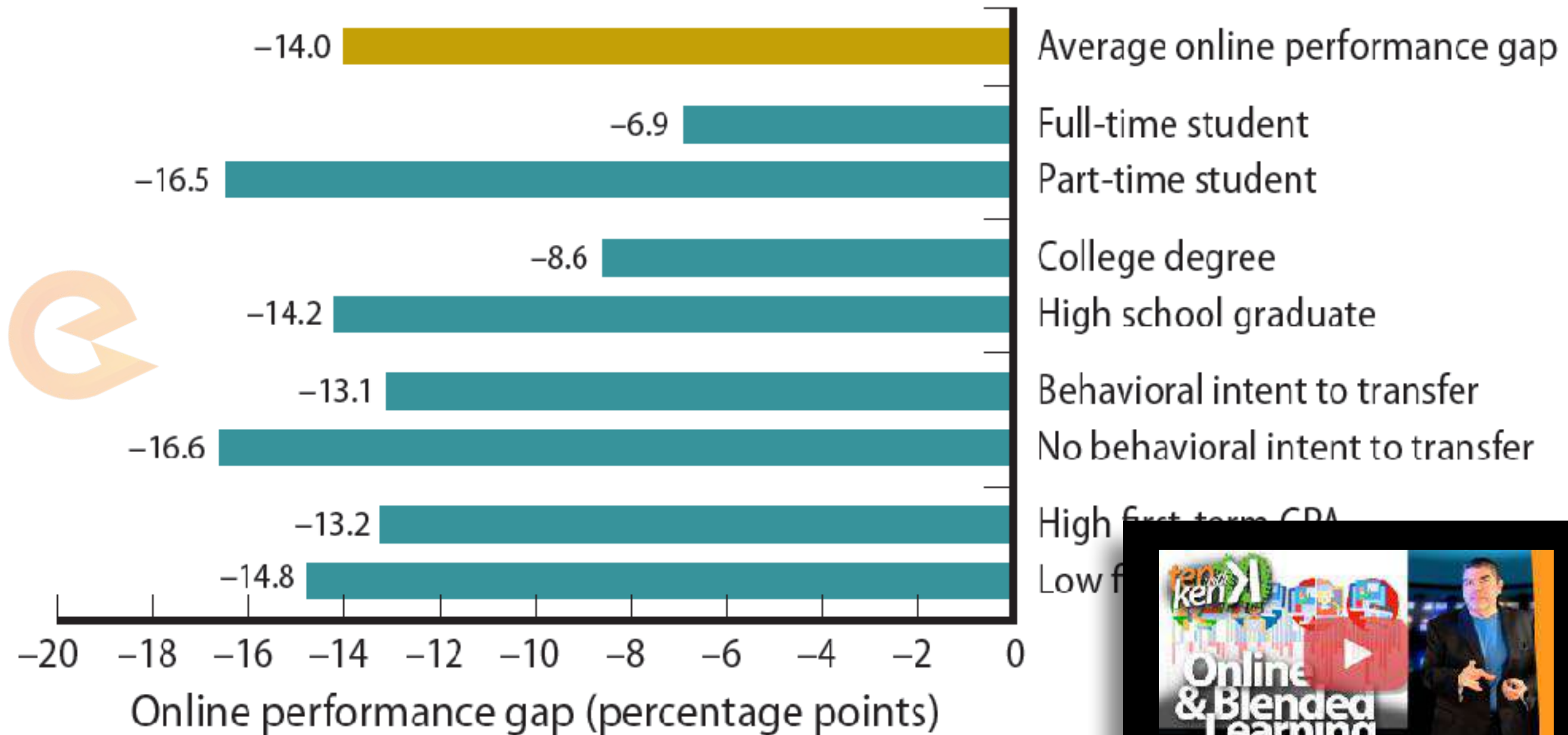
↓

↓

↓

Last step of the recipe

# Online Performance Gap



<https://youtu.be/W1CbtSXvVsA>

**Public Policy Institute of California** May 2014

1 M community college students enrolled in online courses in 2012 | 60% pass online, vs 70% in traditional courses  
 Racial/ethnic gaps are magnified | Accounting for all variables, the gap is 14%





<https://youtu.be/ccQsWCCTabA>

### Coursera Learning Hubs Apr 2014

>30 cities, from Baghdad to Buenos Aires, Moscow to Mumbai and Shanghai to Santiago | Brainstation in Toronto, NY Public Library  
Facilities operated by partners, internet and social learning, mentors | 30-70% completion at learning Centres



# All-in-One Solution

## Earn the Canadian Adult Education Credential (CAEC)

On May 3, 2024, the new [Canadian Adult Education Credential \(CAEC\)](#) replaced the General Education Development (GED®) high school equivalency assessment.

### Study

Resources exist to help you prepare for the CAEC.



[Review the "Test Outcomes" document \(PDF\)](#), which outlines the knowledge and skills needed to successfully pass each test.



[Practice with a sample test](#) available in each subject.



[Watch this video](#) to learn more about how the CAEC tests are structured, written and scored.



[Find a program](#) to upgrade your skills to prepare for the tests.

**tvo ilc**

**TVO Independent Learning Centre Mar 2025**

Offers HS courses towards OSSD | \$100 to take the CAEC test, applies to workplaces, not PSE or apprenticeships



“The **human factor** is perhaps the only fail-proof approach to student retention.”

*Dr Jim Black  
SEMworks LLC  
“Creating a Retention Culture”*





# Indigenous Supports

**Red River College** Apr 2019

22 Indigenous Support Staff listed on website | Aspiring Student Manager, Liaison/Advisors, Resource Coaches, Navigation Coaches  
Employment Coach, Wellness Advisors and Counsellor, 3 Elders



# Success Coaches

## “Part personal advisor and part cheerleader”



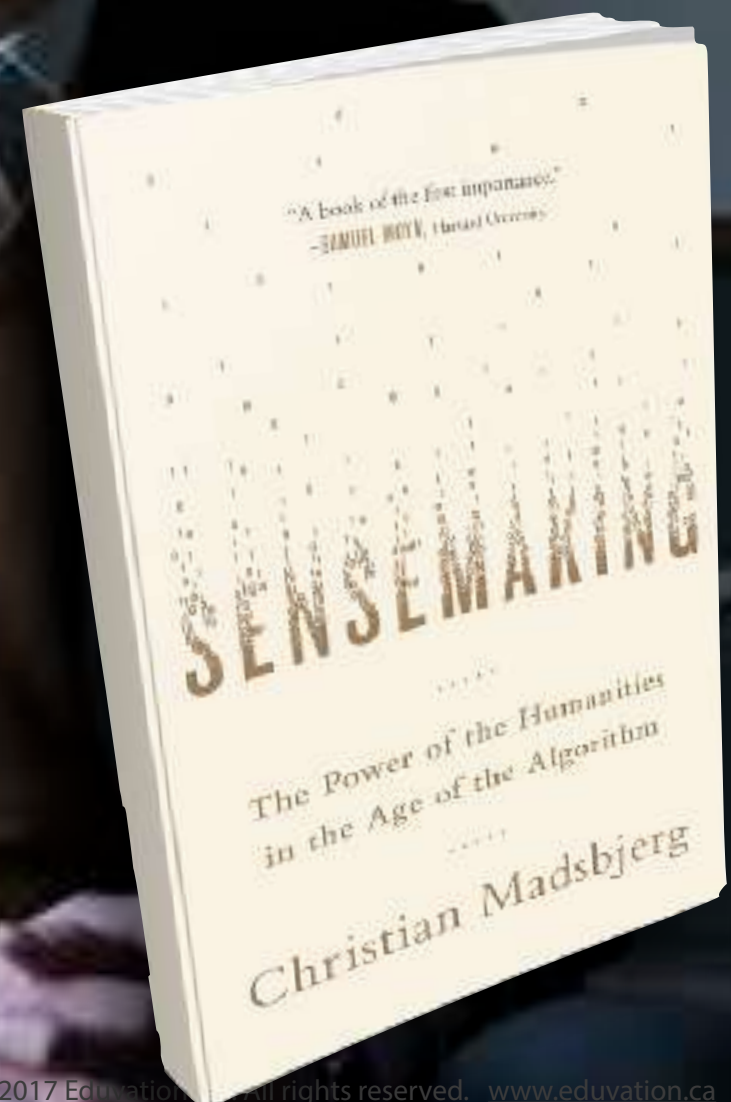
**Arizona State University** Jan 2017

Team of student success coaches in the Student Success Center | Every ASU Online students gets a coach | Proactive outreach, warning signs  
Help with transition, motivation, assist with goal-setting, career advising, time management, academic tips, connections to resources  
Students are segmented by affiliation (Military, Corporate Partners, etc), less chance coaches slip into advising



“Algorithms  
can do many  
things, but  
they will  
never actually  
**give a damn.**”

**Christian Madsbjerg**  
*Founder, ReD Associates*







**George Brown College** Jan 2015

“#InterviewFail” :30 sec spot

# 21st Century Skills

## Foundational Literacies

How students apply core skills to everyday tasks



1. Literacy



2. Numeracy



3. Scientific literacy



4. ICT literacy



5. Financial literacy



6. Cultural and civic literacy

## Competencies

How students approach complex challenges



7. Critical thinking/  
problem-solving



8. Creativity



9. Communication



10. Collaboration

## Character Qualities

How students approach their changing environment



11. Curiosity



12. Initiative



13. Persistence/  
grit



14. Adaptability



15. Leadership



16. Social and cultural awareness

World Economic Forum Mar 2016

16 skills for the 21st century





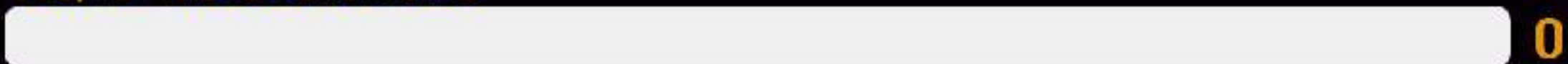
# In your experience, are self-study approaches successful for most GED / CAEC candidates?

15

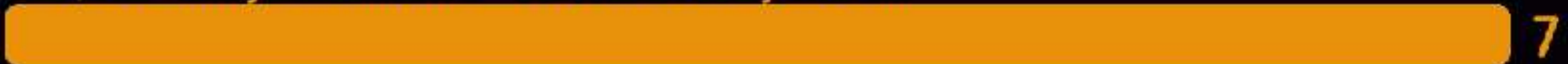
Yes, for almost everybody!



Yes, for most candidates



Yes, for many candidates - but definitely not all



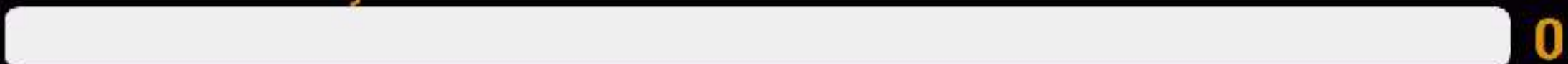
For about half of candidates



For fewer than half of candidates



For almost nobody!







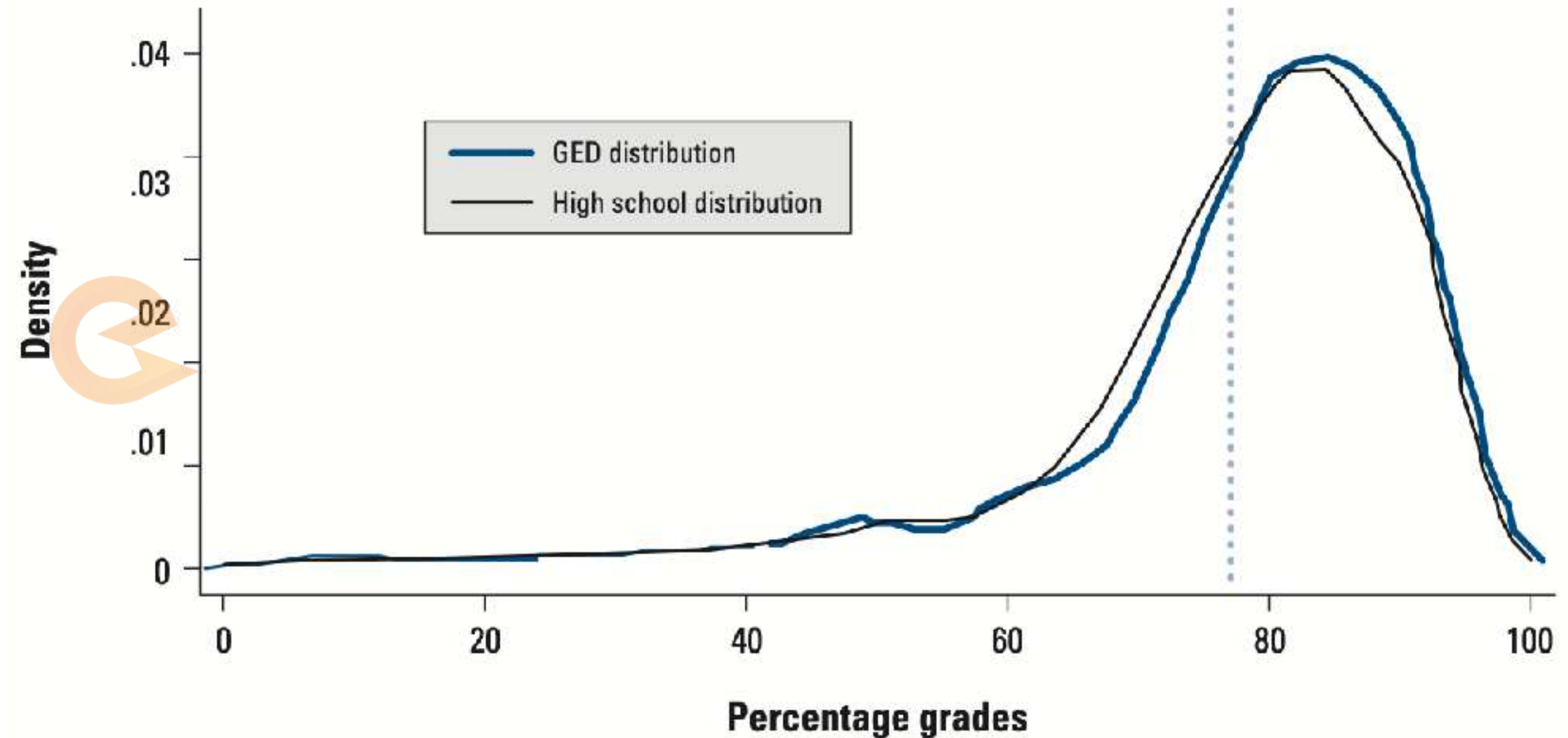
CAEC / CCÉA

# Only the First Layer





# College Performance



HRSDC / Audrey Penner Jan 2011

NSCC performance distribution, 2005-8 | Kernel density graph, almost identical | Almost all lower-performing were HS grads  
25,000 observations | NSCC does NOT use competitive admissions, it's first-come



# The Transfer Loophole

Transfer  
Tuesdays

[uoft.me/utmtransfertuesdays](https://uoft.me/utmtransfertuesdays)

Transfer to  
Redeemer

Ready to experience university  
education in a Christian community?

Division of Students  
York University

TRANSFER TO  
YORK  
UNIVERSITY

YORK U

5 REASONS  
TO  
TRANSFER  
TO HUMBER

HUMBER

INTERNATIONAL TRANSFER STUDENT  
Q&A SESSION

LOOKING TO TRANSFER TO  
BROCK UNIVERSITY?

Eduvation Inc Apr 2024

Public institutions are ramping up domestic marketing budgets, planning to recruit more international students who are already in-country  
On PALs for other institutions, won't count towards institution's PAL cap



# Seamless Credit Transfer

*Automated, No-Cost Transfers*

## **Phase 1:**

500+ ONCAT course equivalencies

Process Improvements

## **Phase 2:**

Integration with PLAR

CBE Frameworks

## **Phase 3:**

Integration with Digital X platform

Modules/Microcredentials

## **Humber Polytechnic Fall 2025**

Moving away from a 'one size fits all' model, to educational pathways 'tailored to the individual needs of students'  
Will automatically recognize all courses and credits earned at all 23 Ontario public colleges



# Military Connections



First-ever “**Military-Connected** campus”  
**Flexibility** for CAF serving students  
**Supports** for veterans, immediate family  
“Helmets to Hardhats” **trades pathway**  
**PLAR** academic credit, **WIL**  
Civil-Military **Leadership** Pilot Initiative  
Veterans Affairs **edu/training benefits**  
Staff / Faculty **PD**  
Training partnership with **Peru’s military**  
Leadership, **Aerospace** programs

## Fanshawe College Nov 2020

Peter Devlin, Lt General, 35 yrs in Canadian Army | Wrote in 1994 about lack of a Peacekeeping Training Centre in former Yugoslavia  
Appointed Fanshawe president in 2013, hired for his “global networks, domestic and international relationships”





PLAR

### Colleges Ontario / McDonald's Canada Aug 2016

24 public colleges in Ontario will grant PLAR to McDonald's employees who have completed Management Development Level 2 ACE accreditation in the US, accepted by >1,800 colleges | A first in Ontario, similar with BCIT Courses in Don Mills over 3 yrs | Employees will enter into 2nd yr of a 2 or 3-yr business administration diploma program



# What should government do to encourage more CAEC uptake? (all that apply)

56

Promote CAEC more



Pay for CAEC prep materials



Pay for CAEC prep instruction



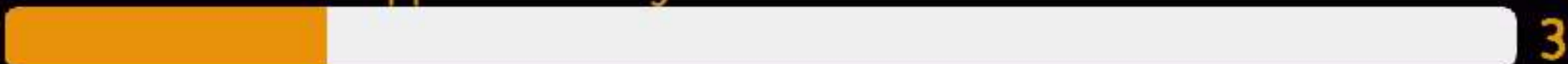
Pay for CAEC testing fees



Provide childcare during prep



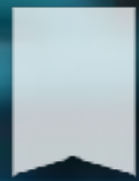
Provide financial support for living costs



Other







CAEC / CCÉA

# Future Complications



1987

2007

2015

2024

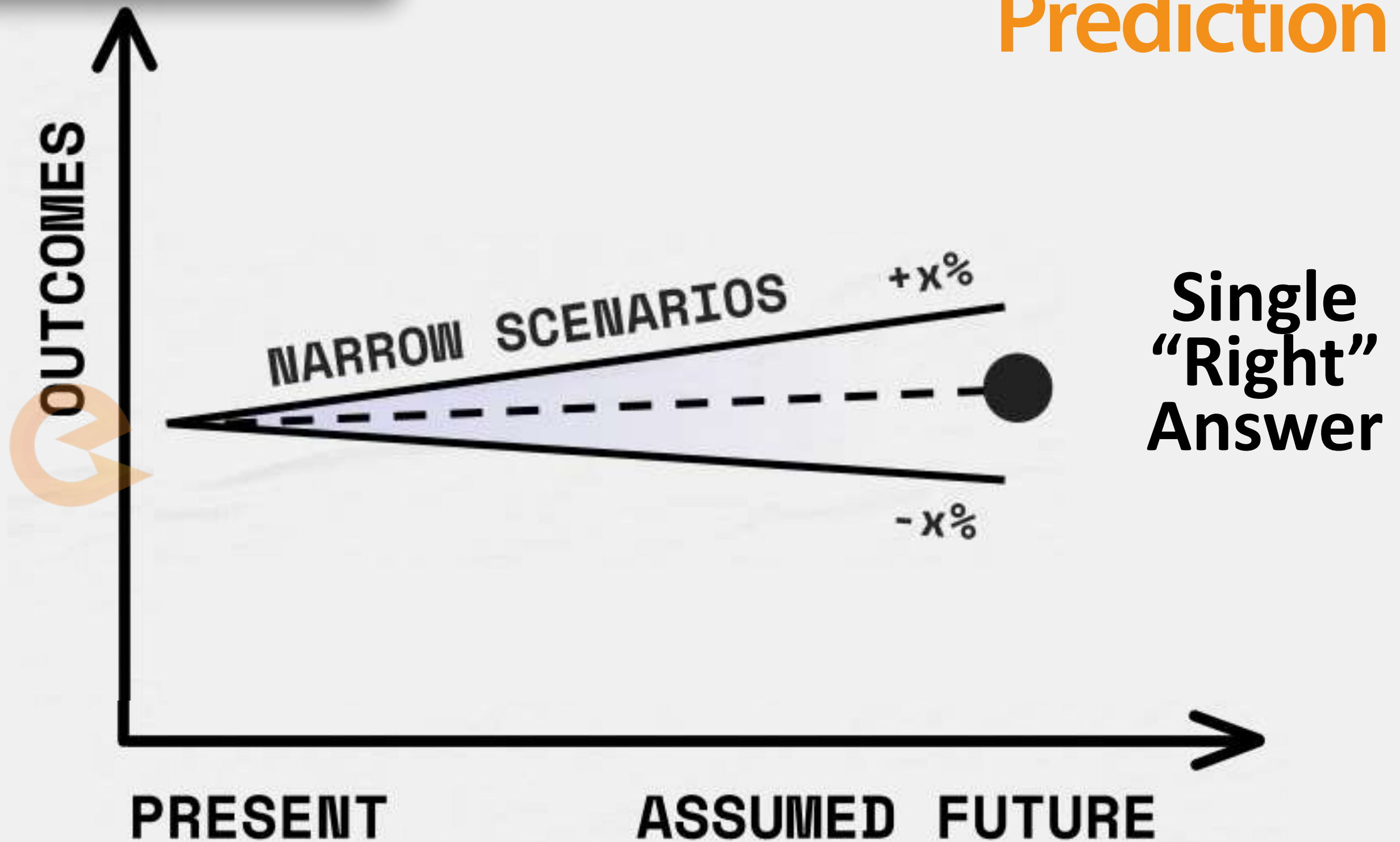


## Apple Newton, iPhone, Watch | Hu.ma.ne AI Pin

Apple's Newton was the first "PDA" (Personal Digital Assistant) and pioneered the use of handwriting recognition  
Apple's iPhone was released in June 2007, smartphones transformed our relationship to the internet



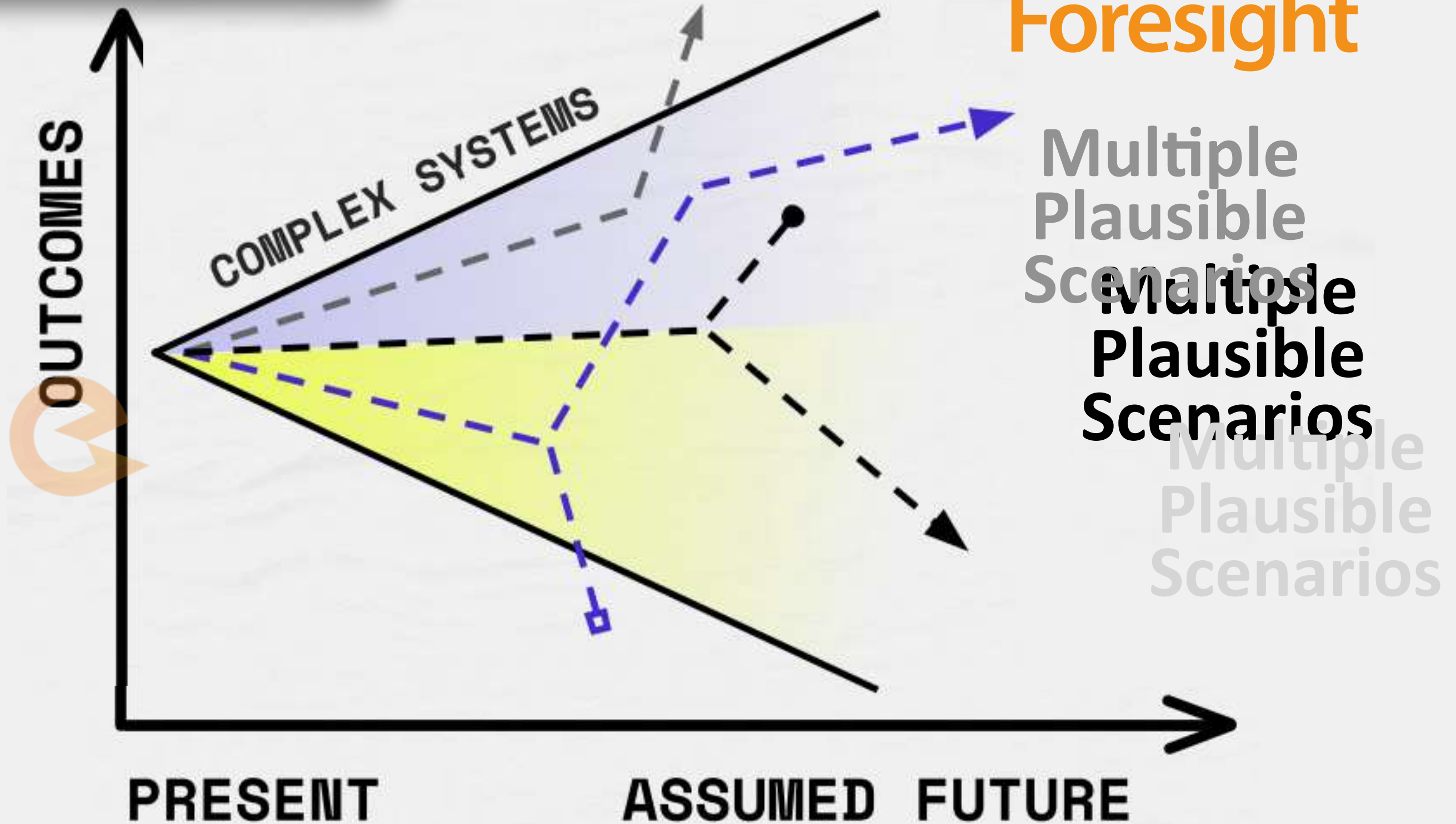
## Prediction



**Disruptive Futures Institute** May 2024

Depends upon forecasts from historical trends | Tends to overlook weak signals, systemic disruptions

## Foresight

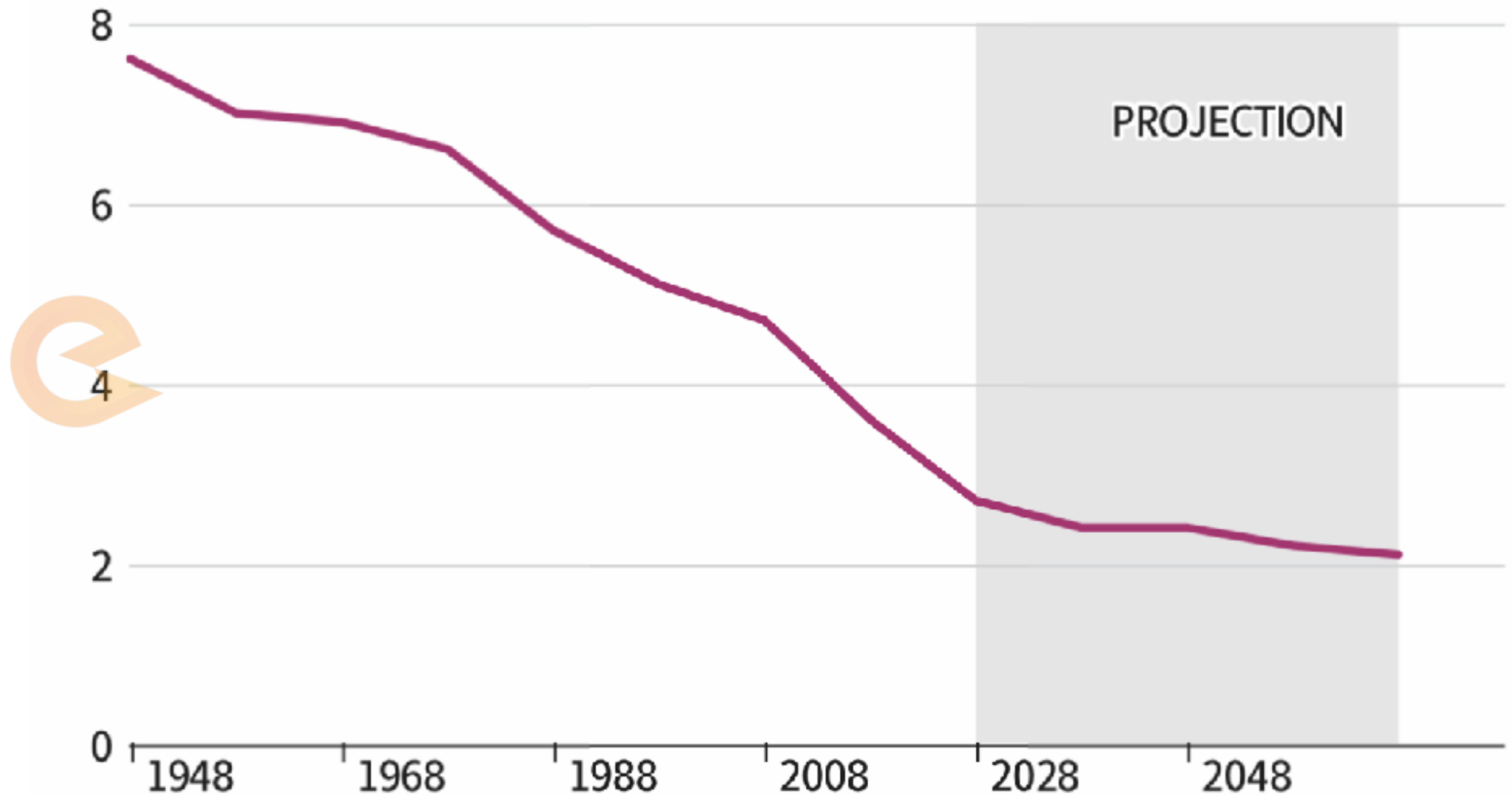


**Disruptive Futures Institute** May 2024

Accommodates uncertainty, unknown variables, second- and third-order impacts, nonlinear change | Imagination can outshine analysis  
Particularly when stakeholders cannot agree on the nature of potential futures, let alone their probabilities  
All about preparation, not prediction



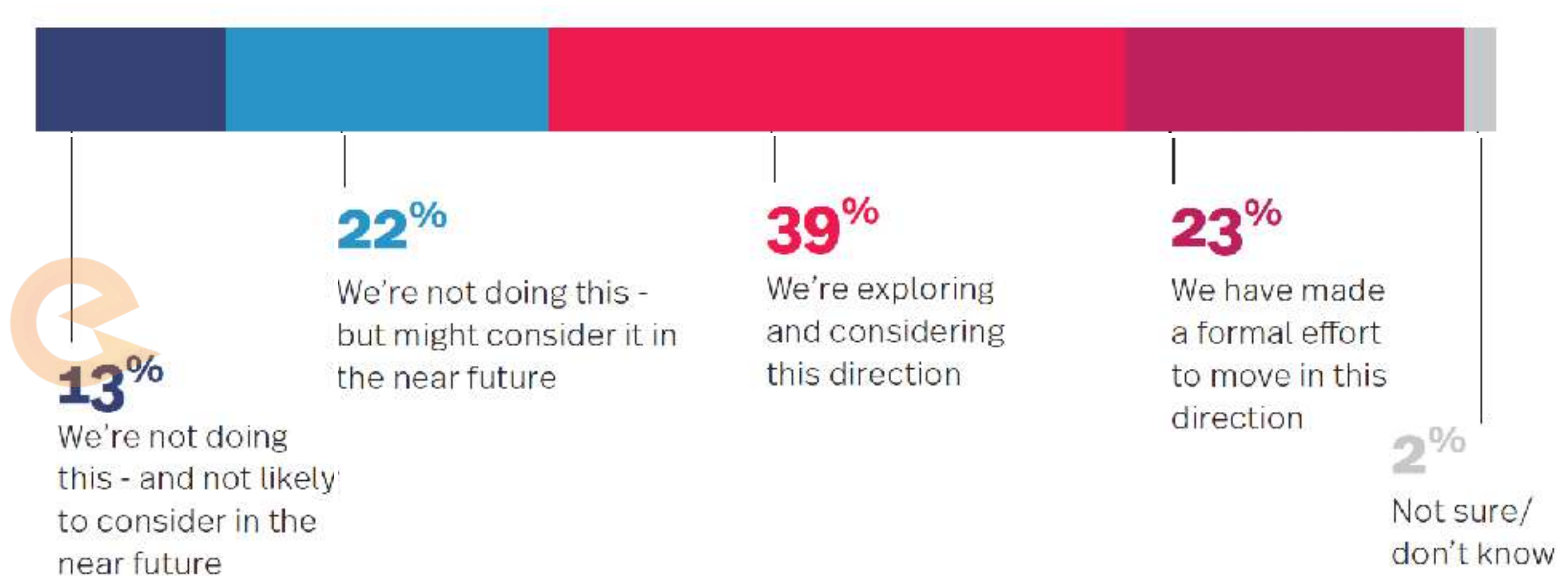
# Labour Market Pressure



**Statistics Canada** Fall 2022

Ratio of workers to retirees, 2028-2068 based on medium-growth scenario for Canadian population  
Boomers and Gen Xers will retire over next 40 years | College enrolments may be tougher

# Skills-Based Hiring



**Northeastern University** Dec 2018

Extent to which organizations have formal skills-based hiring initiatives underway, or are considering a strategy that de-emphasizes degrees and prioritizes skills | *Educational Credentials Come of Age: A Survey on the Use and Value of Educational Credentials in Hiring*  
Report from the Center for the Future of Higher Education and Talent Strategy | Survey of 750 US hiring leaders



# No Degree Required.



Penguin  
Random  
House



Hilton



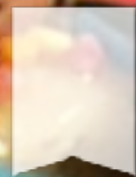
shopify



**Glassdoor** Aug 2018

Companies that no longer require PSE credentials for some of their top jobs | Some may consider them, others emphatically do not





CAEC / CCÉA

# Bite-Sized Learning





**OTAGO**  
**POLYTECHNIC**  
Te Kura Matatini ki Otago

## Otago Polytechnic (NZ) Dec 2016

5-credit microcredentials, combine 3 or 4 to make a 15-credit course | Stackable, just-in-time, online or in workplaces  
Bite-sized learning, granular competencies | Sustainable business practice, project mgmt



# Learning à la carte



**Kellogg Community College, Battle Creek MI Aug 2009**

Regional Manufacturing Technology Centre | Customizable workforce training | Courses broken into 1,200 “skill modules”  
Walk-in basis | Micrometer module: 0.13 credit hours, takes about 3 hours, and costs \$20.94



# 1,670 MOOC Credentials

	<i>Courses</i>	<i>Micro*</i>	<i>Degree</i>
Coursera	6,000	910	34
EdX	3,550	480	13
FutureLearn	1,400	180	22

**Class Central** Dec 2021

19,400 courses from 950 universities | 220 M learners | 20M signed up in 2018 | NOT including China

\* Microcredentials include Coursera Professional Certificates, Specialization, MasterTrack and University Certificates, edX MicroMasters, Xseries, MicroBachelors, Udacity Nanodegrees, and more.



# \$700M

aws academy



## Amazon July 2019

Amazon announces \$700M over 6 years to retrain 100,000 employees, 1/3 of its US workforce | Programs largely outside traditional institutions  
Amazon Technical Academy, Associate2Tech, Machine Learning University | Company establishes the content, courses, competencies  
Could potentially start offering programs to the general public





**75,000**  
enrolled



## Google June 2019

Subsidized 8-month online Google IT support certificate program has enrolled 74,596 students since 2018, >8,000 grads  
\$49/mo on Coursera for students who don't qualify for financial aid | Diversity initiative | 30 major employers recruiting the grads  
25-100 community colleges offer credit-bearing version | Northeastern, UofLondon accepting as PLAR | May be dual credit in HS too



# Branded Microcredentials



**SAITMicro**







# *Exogenous* microcredentials

University Continuing Education courses, Workplace Upskilling, LinkedIn Learning, Co-Curricular add-ons to traditional programs.

Often non-credit add-ons.



# *Endogenous* microcredentials

Stackable modules or nanocredits that assemble into a course, a sequence or certificate - or even a diploma or degree.

Potentially Self-directed, Competency-based, and Gamified. Blockchain credentials for lifelong learning.

Tracey Taylor O'Reilly Oct 2019

AVP of Continuing Studies, York University, writing for The Evolllution

Endogenous microcredit is largely being offered by non-traditional providers, MOOCs, CBL online unis like WGU or SNHU



**32%**  
of Canadians interested  
in Microcredentials

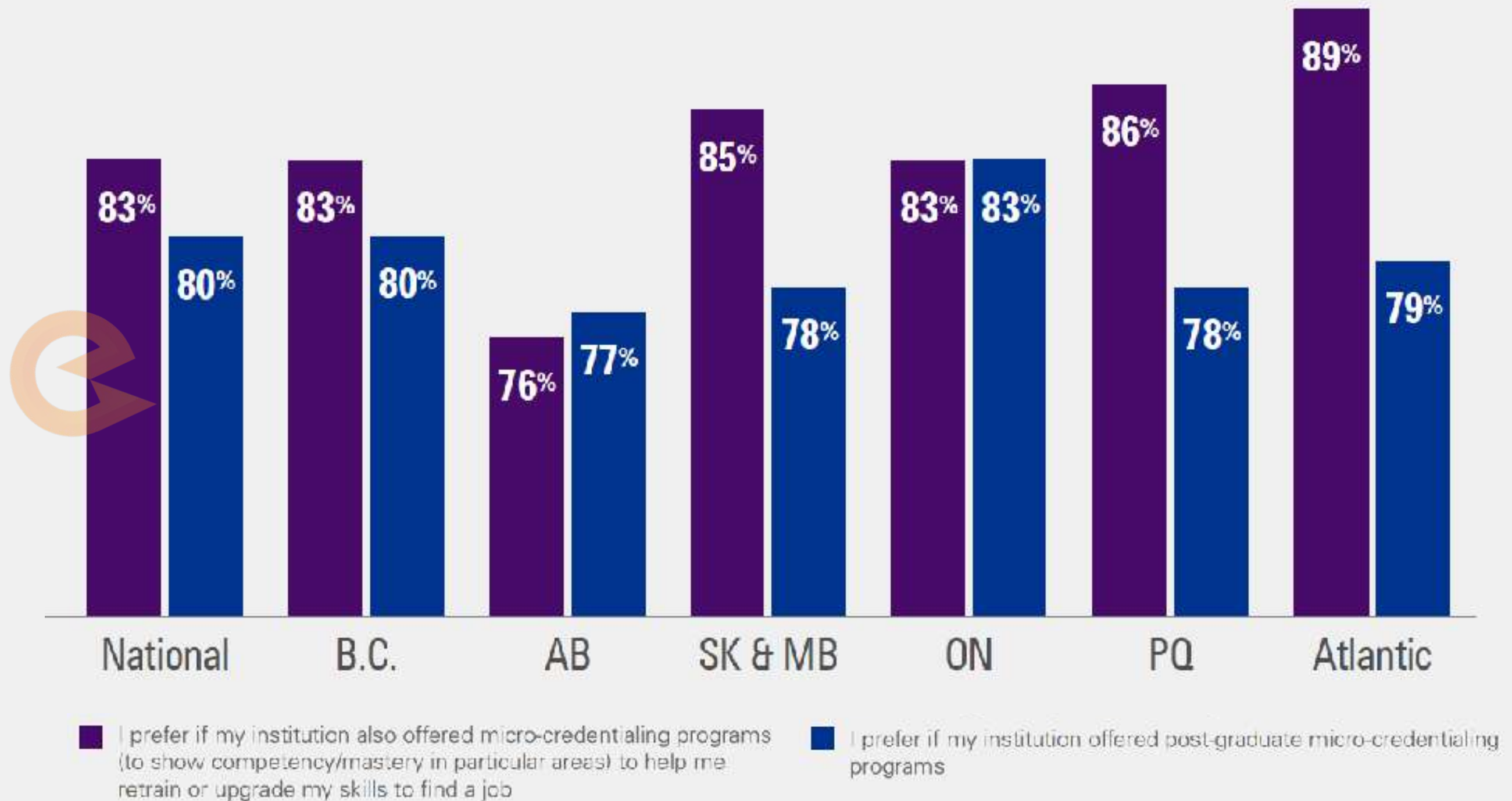
**\$250**

**Higher Education Quality Council of Ontario** May 2021

Sep 2020 survey of working-age Canadians | 74% expressed interest once the concept of microcredentials was explained to them  
(But 42% merely said they would “probably” be interested. 27% were definitely interested.) Few would pay more than \$250 of their own money.



# Interest in Microcredentials



**KPMG Canada** Mar 2022

National poll of Canadian PSE students

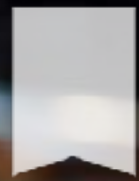
**1,200+**  
**OSAP-Eligible  
Microcredentials**



**eCampus Ontario** Apr 2023

Microcredentials eligible for OSAP loans and grants as of Ontario's 2021 Provincial Budget | Duration from under 25 hours to 100 hours  
As of April 2023, [MicroLearnOntario.ca](https://microlearnontario.ca/) reports 1,776 microcredentials at colleges and universities across Ontario



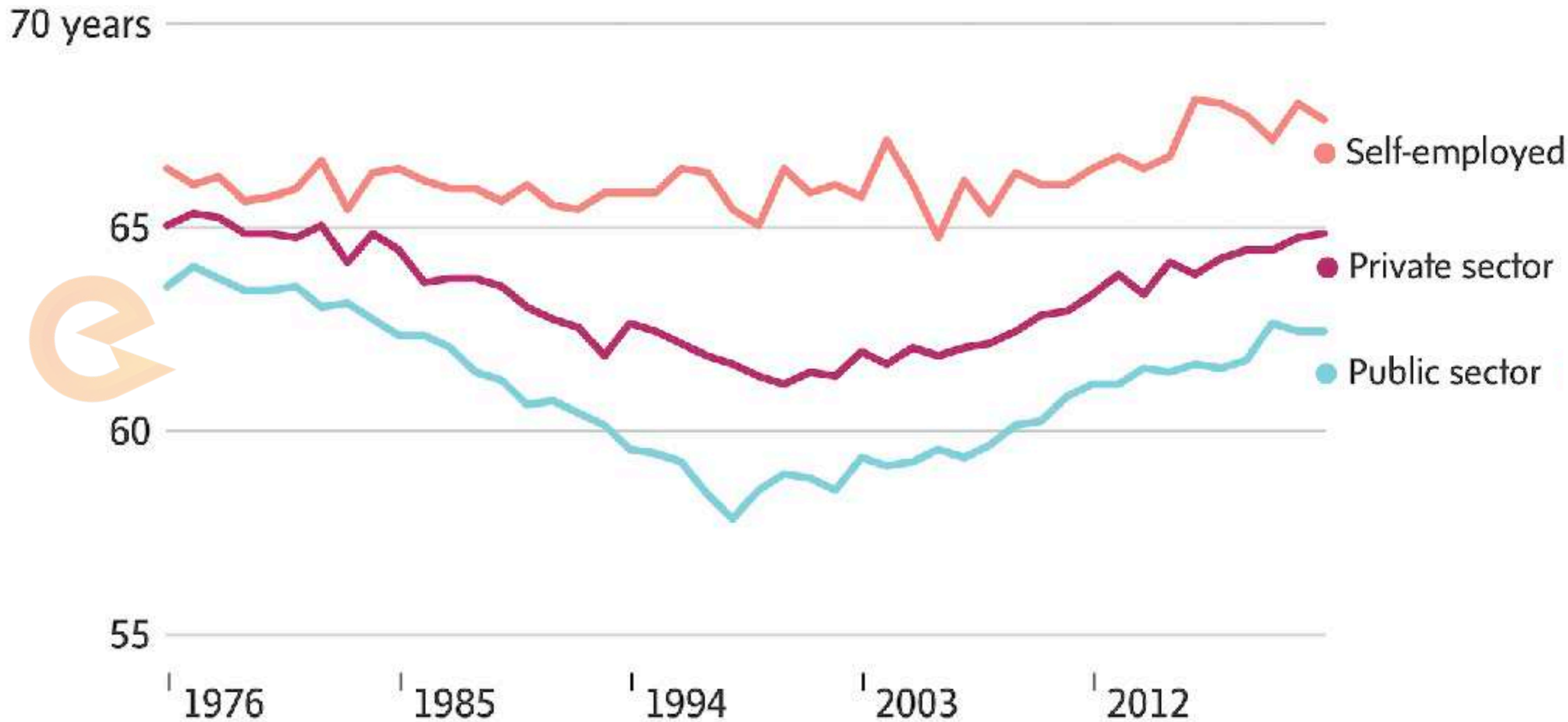


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Going Back  
for Seconds  
and Thirds!



# Delayed Retirement



Statistics Canada Nov 2022

Average retirement age, 1976-2021

Graph by Frederick Vettesse, Globe & Mail





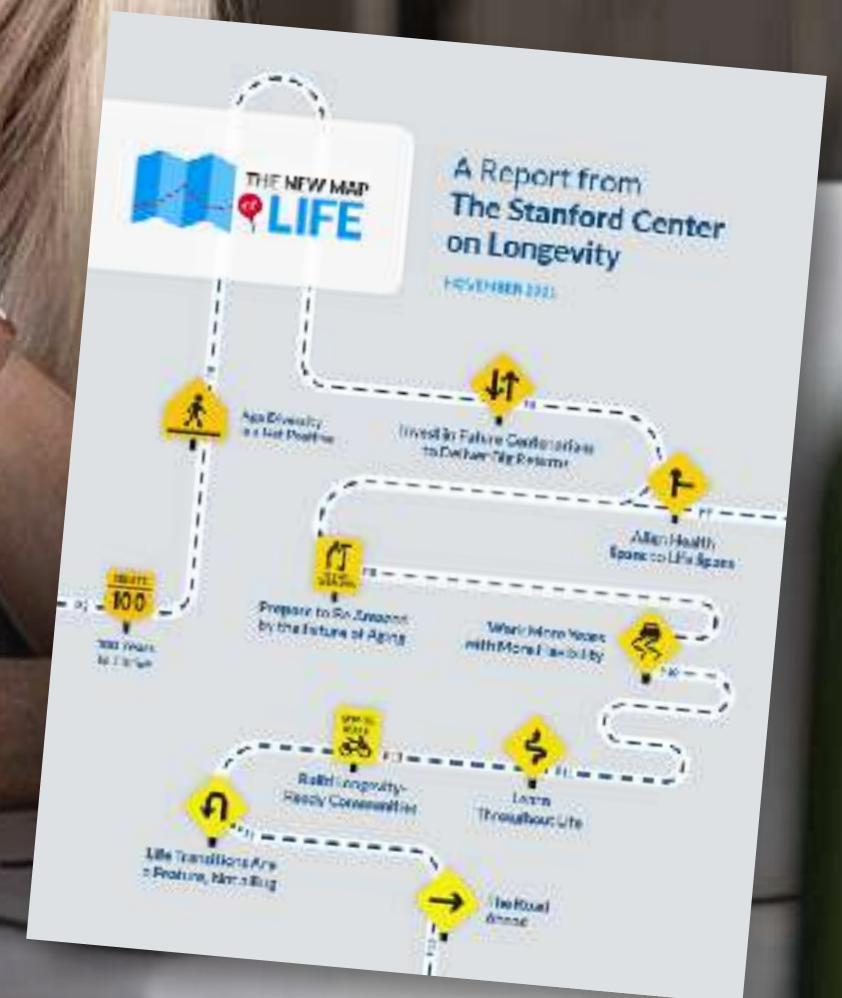
“By 2031,  
Canada’s labour  
force *deficit*  
will reach  
*4 million*  
workers.”

*Rick Miner*  
*Former President, Seneca College*  
*President, Miner + Miner*



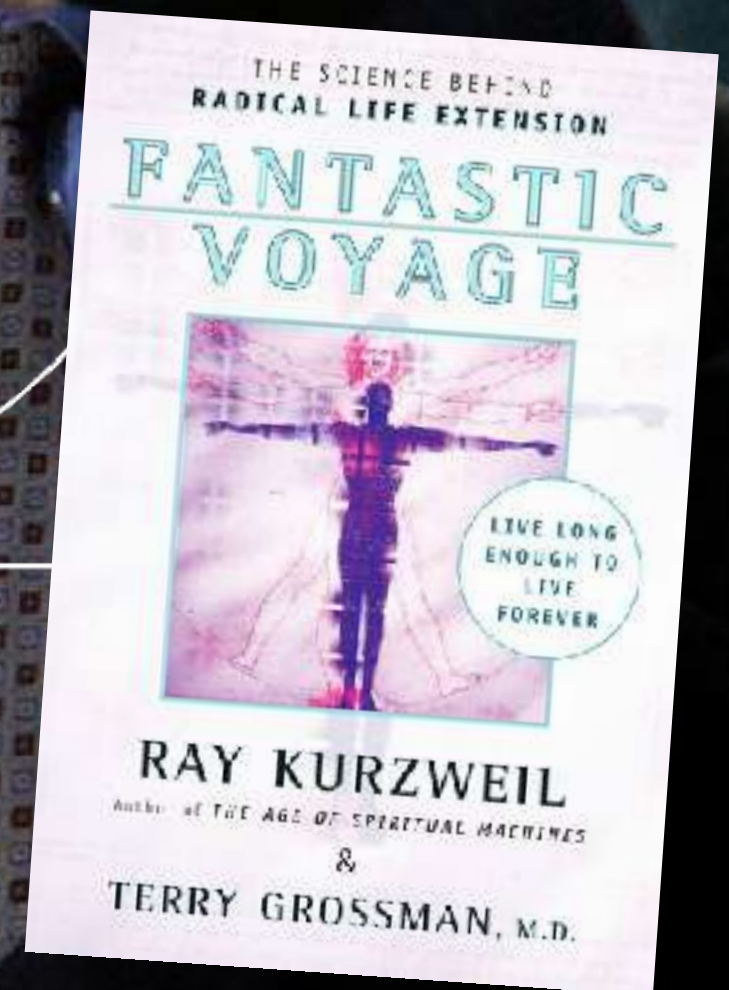
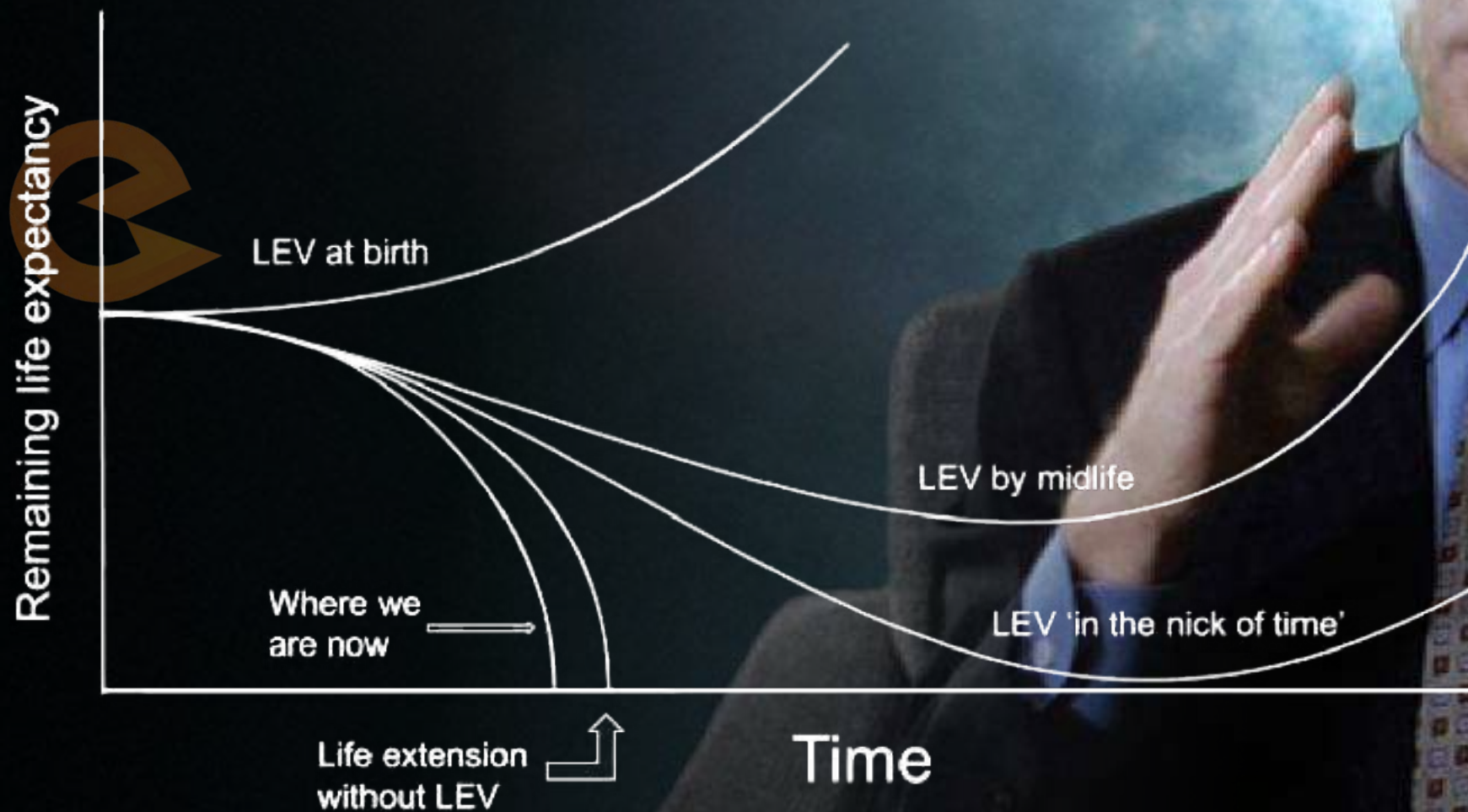
“Half of today’s **5-year-olds** can expect to live to the age of 100... Over the course of **100-year lives**, we can expect to **work 60 years** or more.”

*The New Map of Life: A Report from the **Stanford Center on Longevity**, November 2021*





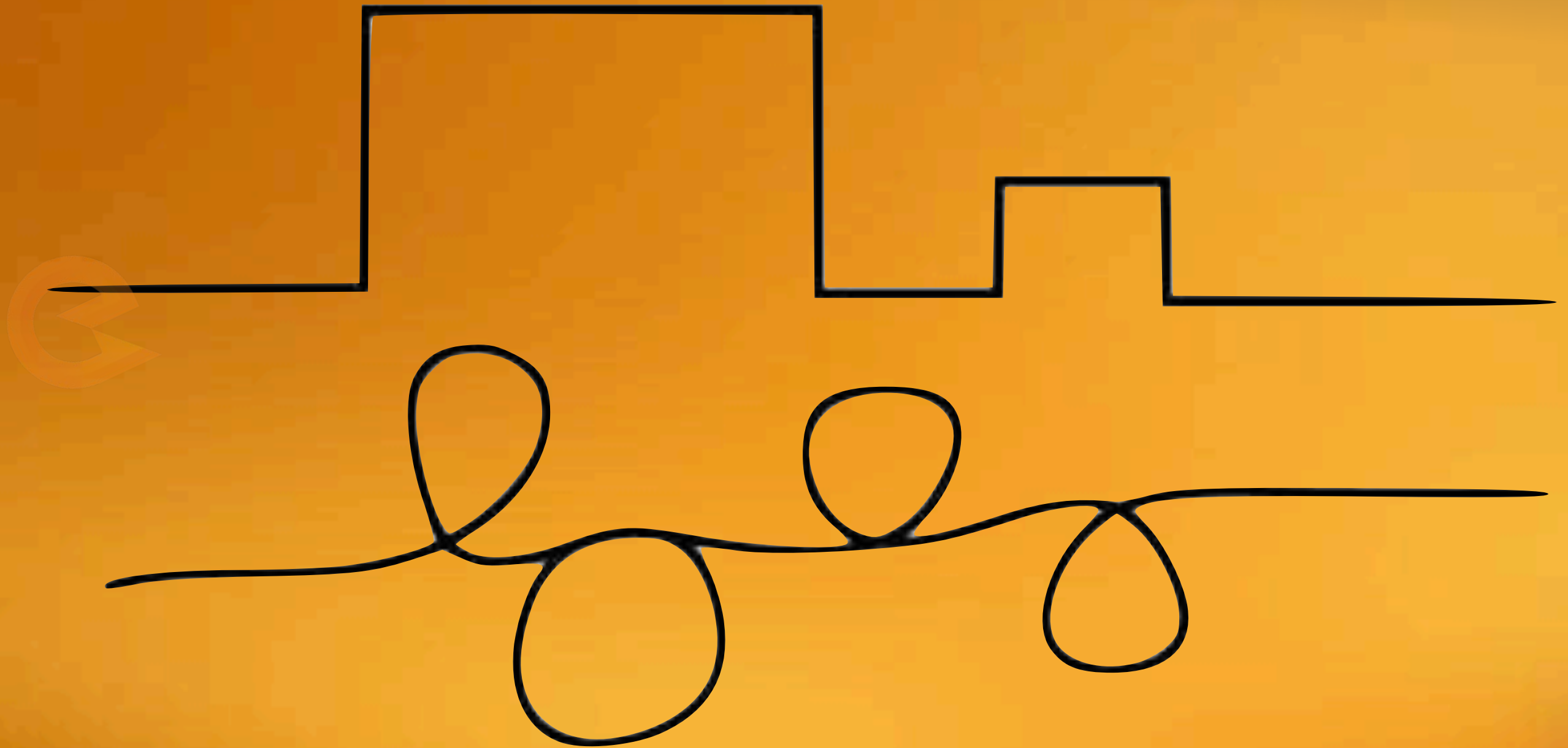
# “Longevity Escape Velocity”



**Ray Kurzweil**  
*TED Talk, Vancouver, April 2024*

Source: <https://youtu.be/uEztHu4NHrs>

# Open Loop University



**Stanford University July 2014**

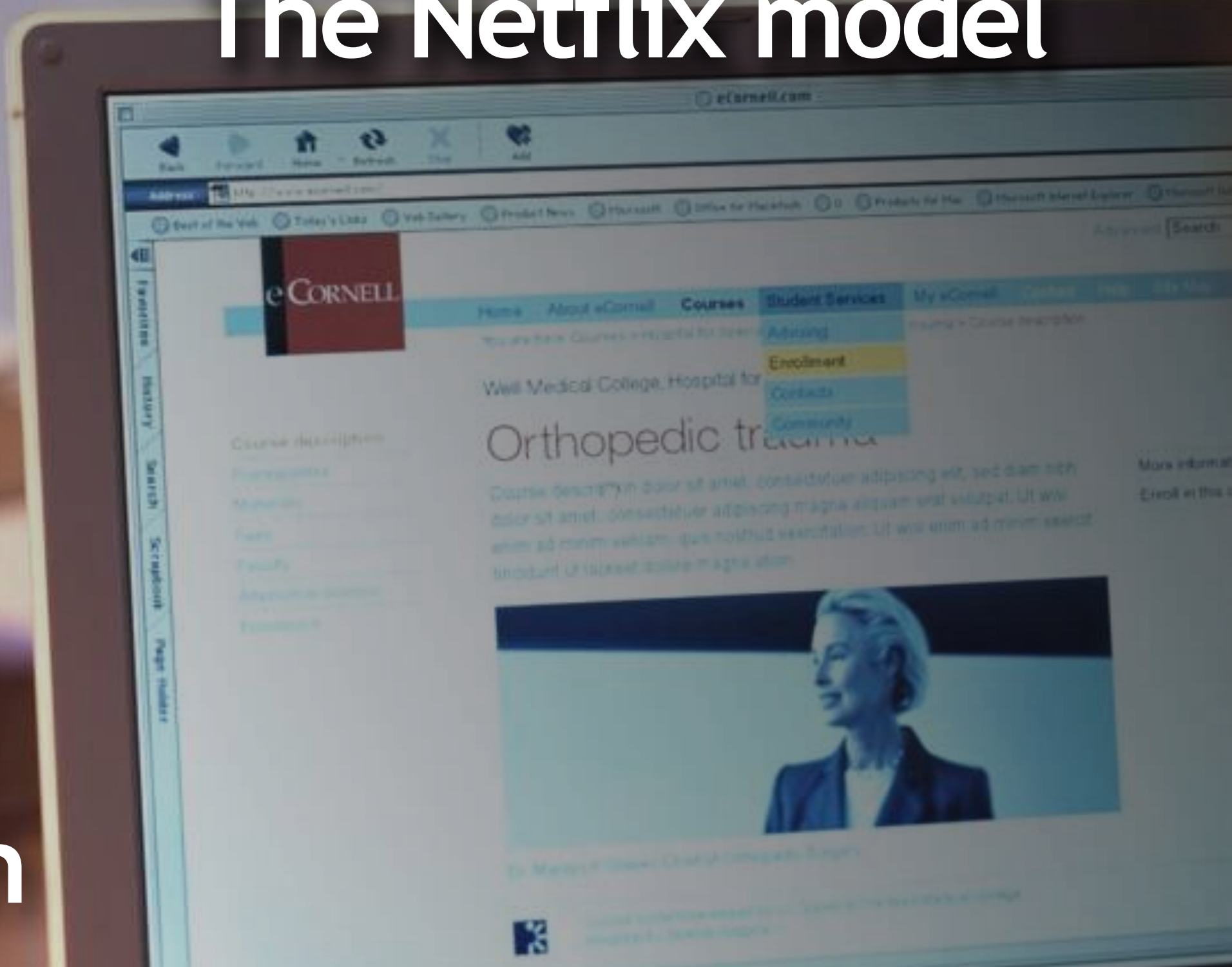
D.School (Design Thinking School) imagined potential future scenarios for Stanford Fast Forward. One potential approach they called the “open loop” university model, in which students move fluidly back and forth between work and campus, rather than taking all of their education in large blocks away from employment.



# The Netflix model



**\$40**  
per month



**eCornell** Apr 2014

>30 professional business certificates | Self-paced, asynchronous | 6-8 hr courses, defined 2-week period | \$40 per person per month | Active problem-solving, practice opportunities | 90% completion rate

# On-Demand Education



**C**  
**CENTRE FOR  
ON-DEMAND EDUCATION**

**PROVIDENCE** Centre for On-Demand Education

## 4 EDUCATIONAL VALUES OF CODE

- CONTEXTUAL**  
CODE learning happens in the workplace. We value hands-on, on-the-job training. Curriculum is designed alongside our partners. This enables the student to prove their learning is more than conceptual and ensures outcomes meet your needs.
- MENTORED**  
The key to CODE is mentoring. Students are supported by a team of three - contextual mentor, academic mentor and proctor - who guide, encourage and support them in their learning. Mentors assess student demonstration of proficiency in practical knowledge, technical skill, and personal character.
- ON-DEMAND**  
Providence fits education to the student in the time and manner they need it. Private access to an online learning platform is shared between student and mentors for ongoing interaction and articulation of outcomes to meet our highest accreditation standards.
- SUBSCRIPTION MODEL**  
Students pay a set fee every month they study. They are not tied to semesters or deadlines. The subscription rate is typically half the Providence tuition rate. Students set the pace of their learning.

# \$350/mo

**Providence University College (MB) Aug 2023**

CODE (Centre for On-Demand Education) offers customized, self-paced online WIL, CBE, with PLAR | 3 **mentors**: contextual, academic, proctor  
**Modular** - courses can be assembled into certificates, microcredentials, diplomas, and degrees  
First offering: Transforming Leadership degree | Avg \$350 monthly **subscription** - half the usual, can be paused

Source: <https://youtu.be/iH90dXITe4o> | [www.prov.ca/code](http://www.prov.ca/code) | [https://issuu.com/providencereader/docs/4.23\\_code\\_partner\\_brochure\\_online\\_version](https://issuu.com/providencereader/docs/4.23_code_partner_brochure_online_version)



DISTINCT UNIVERSITY EXPERIENCE



*Year 7-10 Strategy:*

“Create and implement an innovative  
**Subscription University Model**  
(SUM) that enables a diverse population to  
have access on demand to educational  
and training resources.”

Viewbook 2020-2021



# “Create a **Lifelong Learning Ecosystem**”

Establish a **PhD** program

New **specializations** around critical issues

More **EDI / Indigenous** Case content

Identify optimal degree **portfolio mix**

**Partner with others** to broaden programs

New senior **internationalization** leader

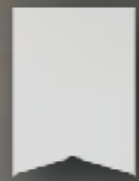
“Meaningfully engage” with **UN PRME**



**Ivey Business School, Western U** Strategic Plan 2022

Focusing on critical issues, currently: the Evolution of Work, Global Citizenship/Competitiveness/Innovation, and Sustainability





CAEC / CCÉA

# Automated Teaching





# VR Simulations



VIRTUALLY VISITING A LOST PALACE

**Yale University Sep 2017**

Archaeology visit to now-destroyed ancient Assyrian palace using Oculus Rift

Source: <https://youtu.be/y0EVnOqvguQ>



**Google Earth VR Nov 2016**

VR immersion for maps of the globe, streetview, for HTC Vive and Oculus Rift

Source: [g.co/earthvr](https://g.co/earthvr)



**Labster Nov 2013**

Harvard, MIT, Waterloo, hundreds of others - million-dollar VR biochem lab

Source: [www.Labster.com](http://www.Labster.com)



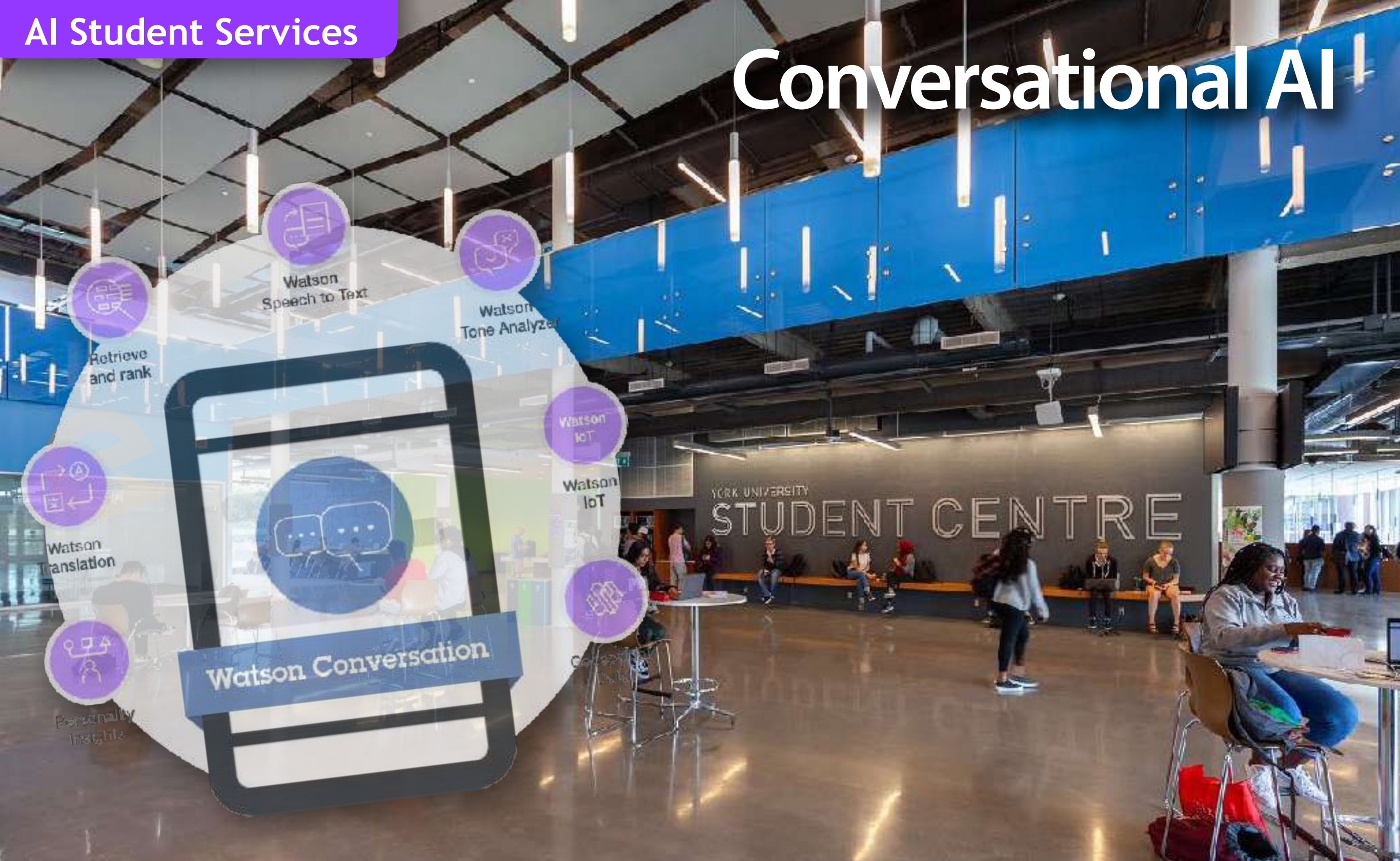
**Rome Reborn Aug 2015**

Open source 3D recreation of ancient Rome, 1000 BC to 550 AD

Source: [https://youtu.be/e\\_phjB19ZEg](https://youtu.be/e_phjB19ZEg)



# Conversational AI



**York University** Jan 2019

AI-powered student support virtual assistant pilot with IBM Watson | 24/7 academic and personal guidance, FAQs and referrals  
>100 students, <75,000 interactions in first 3 months, machine learning | English and French, by computer or phone  
Considers student-specific data | Also Bolton College UK, Deakin University Australia





**Embibe.com** Nov 2017

Aditi Avasthi, CEO of Embibe, at “Global Entrepreneurship Summit 2017” (2:00 min)  
Personalization, behavioural nudges, hyper-personalization | 14M variables per child per day  
20 hrs use = 89% improvement on standardized tests

Video edited by Ken Steele. Original Sources: <https://youtu.be/mDFe9DwtzFc> and <https://youtu.be/yBdcU8ncA7Q>



# Adaptive Learning



**33%**  
fewer failures

**Georgia State University** Oct 2018

Gateway courses failed as many as 43% of students | Pre-calculus, college algebra, intro statistics  
Replaced ALL lecture courses with adaptive learning software, 24/7 learning emporiums | Reduced 43% DFW to 28%  
Now converting gateway required courses in Economics, Politics, Psychology too





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# Essential Ingredients





## What are the perfect ingredients we'll need for CAEC to rise? to expand and grow? (Enter your own sentences or vote up/down others)

18

Promotion, resource development, industry partnerships, training for facilitators

👍 8 🗨️ 0



CAEC needs to gain the same notoriety that the GED had

👍 8 🗨️ 0



More widespread recognition by the general public for what it is (and what it's not) and what it's used for

👍 7 🗨️ 0



Validating it in both students, PS and industry. Meaning, where it fits as a replacement for GEC or not.

👍 6 🗨️ 0



Employers to endorse their use of CAEC

👍 6 🗨️ 0





Promotion, resource development, industry partnerships, training for facilitators	8
CAEC needs to gain the same notoriety that the GED had	8
More widespread recognition by the general public for what it is (and what it's not) and what it's used for	7
Validating it in both students, PS and industry. Meaning, where it fits as a replacement for GEC or not.	6
Employers to endorse their use of CAEC	6
A community of practice	5
More prep materials for individual learners to prepare on their own if they want to or are unable to attend an in-person prep centre	5
Advocacy for CAEC as a first step for adults in foundational learning from a community of testing, prep, management , and access practitioners.	5
Understanding where CAEC fits in the different layers of other credentials in provincial jurisdictions.	3



Create manuals to help the students understand the outcomes—outcomes are educators' speak, and students just want to prep.	3
More awareness in the general public	3
Training for Tutors/instructors to build capacity to support	3
We'll need stronger promotion and clarity on how the CAEC will be used by post secondary and employers.	2
Funding for those that cannot afford the courses to prep, to live in lieu of working and the actual test.	2
Foundational learning programming that uses CAEC as an entry point. GED curriculum works as strong foundational learning programming.	1
Funds from the foundational community of learning that would allow independence from governments when delivering and developing CAEC learning resources and support services.	1
More granularity in its assessment capability - A higher ceiling.	1
From a	0





How could you benefit from a foundational learning community of practice? What are you most seeking? (Enter your own sentences or vote up/down others)

10

A foundational community of practice that has national standards in it would enable inter-provincial navigation.

6 0



kindred spirits who could share unvarnished but helpful learnings

5 0



As a literacy coordinator, I would benefit from understanding what resources are available for CAEC prep for our tutors and learners Also, know where to find resources that I can use to advise our learners to explore that meets their career or educational needs.

3 0



Solutions to common challenges

3 0



As CAEC is rolling out, all provinces are at different steps. I wonder if a provincial or national CAEC is needed to communicate to PS etc?





A foundational community of practice that has national standards in it would enable inter-provincial navigation.	6
kindred spirits who could share unvarnished but helpful learnings	5
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Solutions to common challenges	3
As CAEC is rolling out, all provinces are at different steps. I wonder if a provincial or national CAEC is needed to communicate to PS etc?	2
a group that might serve for CAEC advocacy and rigor...	1
Projects, funding, onboarding, and applied learning strengthened by a community of practice.	1
Also, can we call a spade a spade that CAEC is built and supported by private enterprise?	0
a place to share our CAEC "recipes"	0
People feel fulfilled and having the resources- skills, money, etc.. to live a good life with options.	0



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# Food for Thought?







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# It's Been a Slice!

**Ken Steele**

*Chief Futurist, Eduvation  
Eduvation Circles virtual community  
Host, Ten with Ken podcast*

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519.432.3600  
www.eduvation.ca*



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# Share the *Big* Picture



From New England to New Zealand, hundreds of college and university leaders have brought higher ed futurist and brand strategist Ken Steele to campus to share his dynamic, eye-opening and engaging perspective with governing boards, executive leadership, marketing and enrollment committees, and the broader campus community.

Ken delivers on hundreds of topics, from strategic planning and alternate revenue generation to student trends, disruptive competition, and innovations in teaching and learning. In every case, he will work with you to develop a customized lecture, workshop, or retreat to build consensus and momentum for bright ideas at your institution.





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