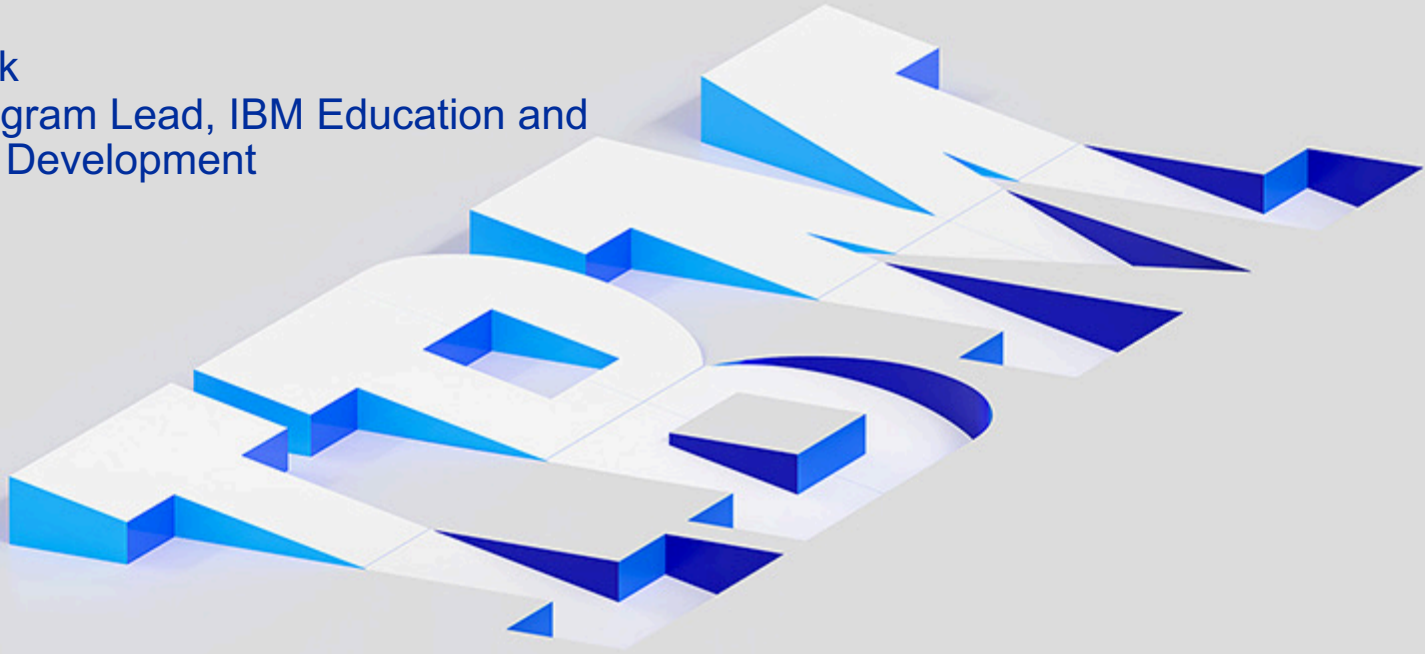


# Strategies for future-fit talent development

Sonia Malik

Global Program Lead, IBM Education and Workforce Development



# The state of disruption continues

Advent of  
Cloud and  
AI

Pandemic

Social  
and  
Racial  
unrest

Political  
Conflict

The post-pandemic era has introduced the need for new business models, new ways of working, and a flexible culture that fosters the development of critical new skills

**\$800B**

Could be added to the US GDP by 2030 as a result of effective upskilling

Florida gained

**523,000**

Jobs in 2021 after losing 435,000 jobs in 2020

The time it takes to close a skills gap through training has increased more than

**10x**

in the last 4 years

**120+ million**

workers in the world's 12 largest economies may need to be retrained / reskilled in the next 3 years as a result of intelligent automation

**Half of Americans**

who quit their jobs last year made a career change.

**62.4%**

Florida's growth in GDP eclipsed the US growth rate of 47.4%

# PwC Report Workforce Of The Future: The competing forces shaping 2030

“The secret for a bright future seems to lie in flexibility and in the ability to reinvent yourself. If you believe that the future lies in STEM skills and that interests you, train for that. But be prepared to rethink if the world doesn’t need so many programmers. Think about yourself as a bundle of skills and capabilities, not a defined role or profession.”

Carol Stubbings Global Leader, People and Organisation, PwC

# 65%

*think technology will improve their job prospects in the future.*

# 74%

*believe it’s their own responsibility to update their skills rather than relying on any employer.*

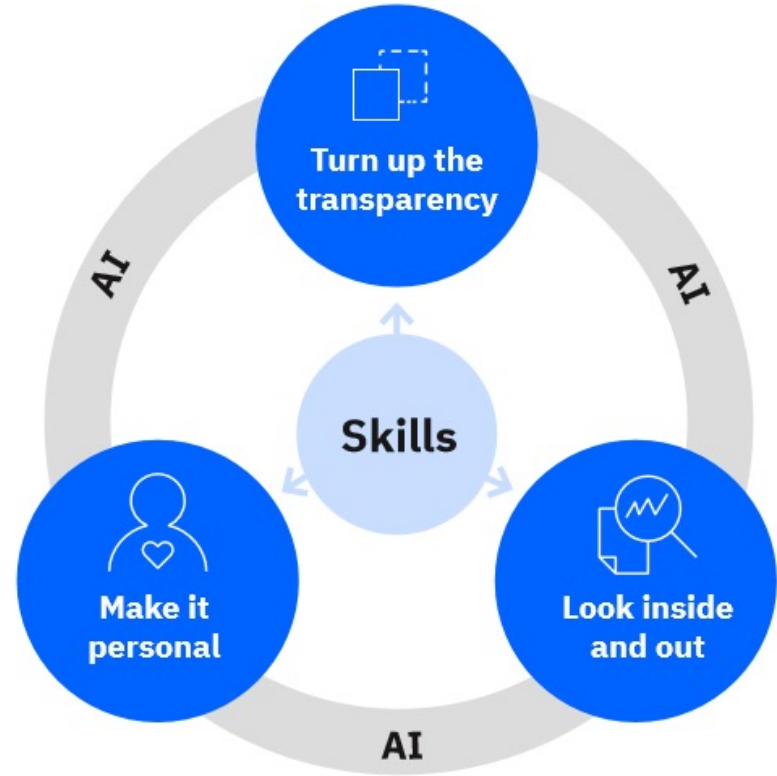
PwC survey of 10,029 members of the general population based in China, Germany, India, the UK and the US – base all those who are not retired 8,459



**To build the workforce  
of the future  
we need to  
revolutionize  
how we learn**

# Skills at the core

AI can help enable transparency and skills personalization in the expanded learning ecosystem



# 1 Make it personal

Perform a skills inventory of the existing workforce

Identify roles and skills required in the future

Create a culture of lifelong learning with personalized journeys



## ② Turn up the transparency

Information to self-direct their learning and career choices

Reward and recognize employees for their skills acquisition





## ③ Look inside out

Build agile teams with diverse skillsets

Share skilled talent across organizational boundaries

Collaborate to continually explore and pilot innovative skills gap closure strategies with a coalition

Apply AI to source and harmonize the most relevant platforms and assets



# Creating Ecosystems To Build Future Ready Workforce

## Capability building through collaborations



**79%**

MOOCs



**64%**

Training  
Academies



**60%**

Other  
Enterprises



**53%**

Academic  
Institutes

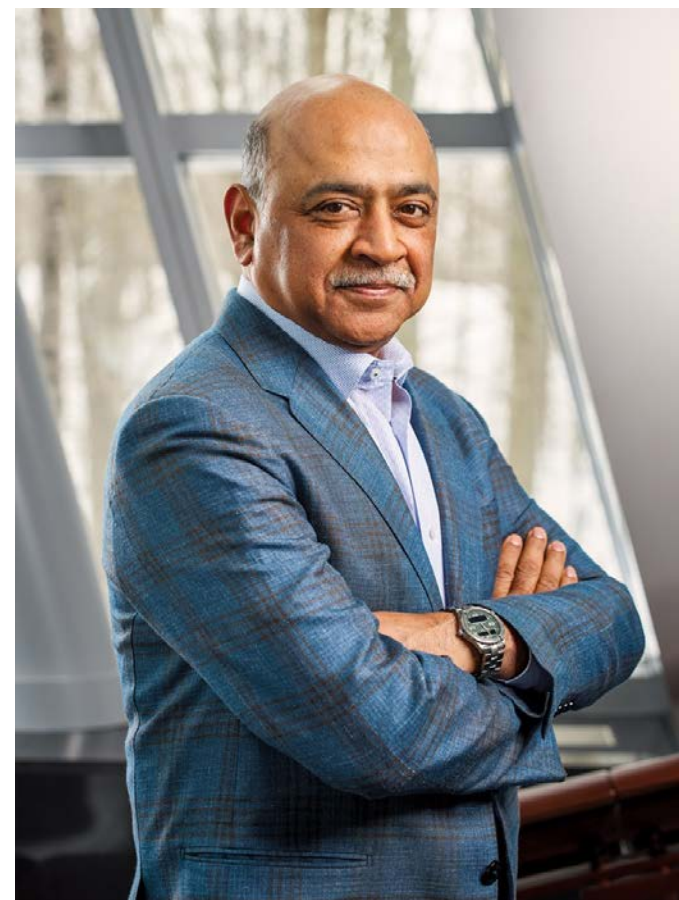


**23%**

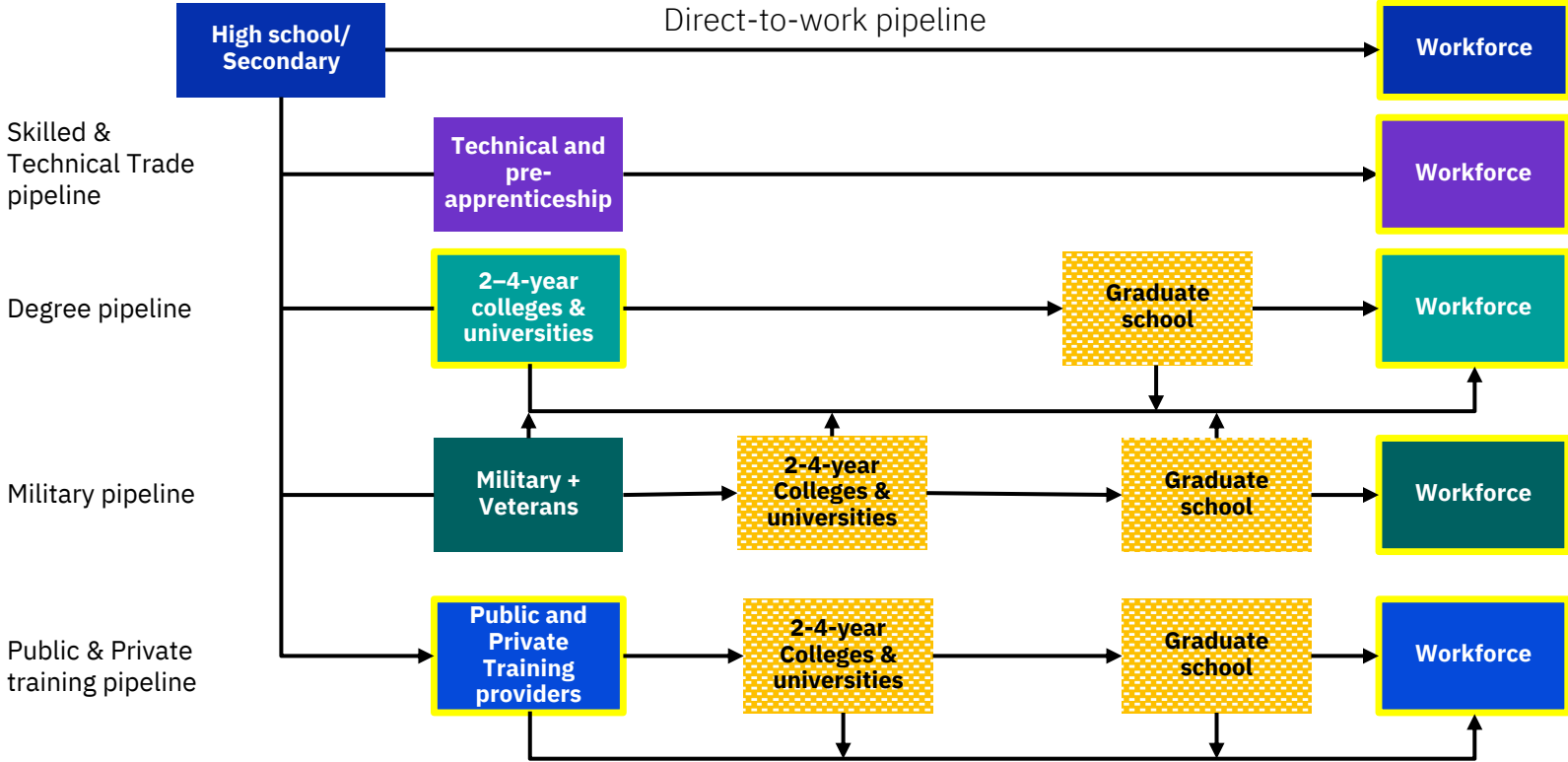
Government

*“Talent is everywhere; training opportunities are not. This is why we must take big and bold steps to expand access to digital skills and employment opportunities so that more people – regardless of their background – can take advantage of the digital economy. This will help democratize opportunity, fill the growing skills gap, and give new generations of workers the tools they need to build a better future for themselves and society.” - - Arvind Krishna, Chairman and CEO, IBM*

**Skill 30 million  
people by 2030**



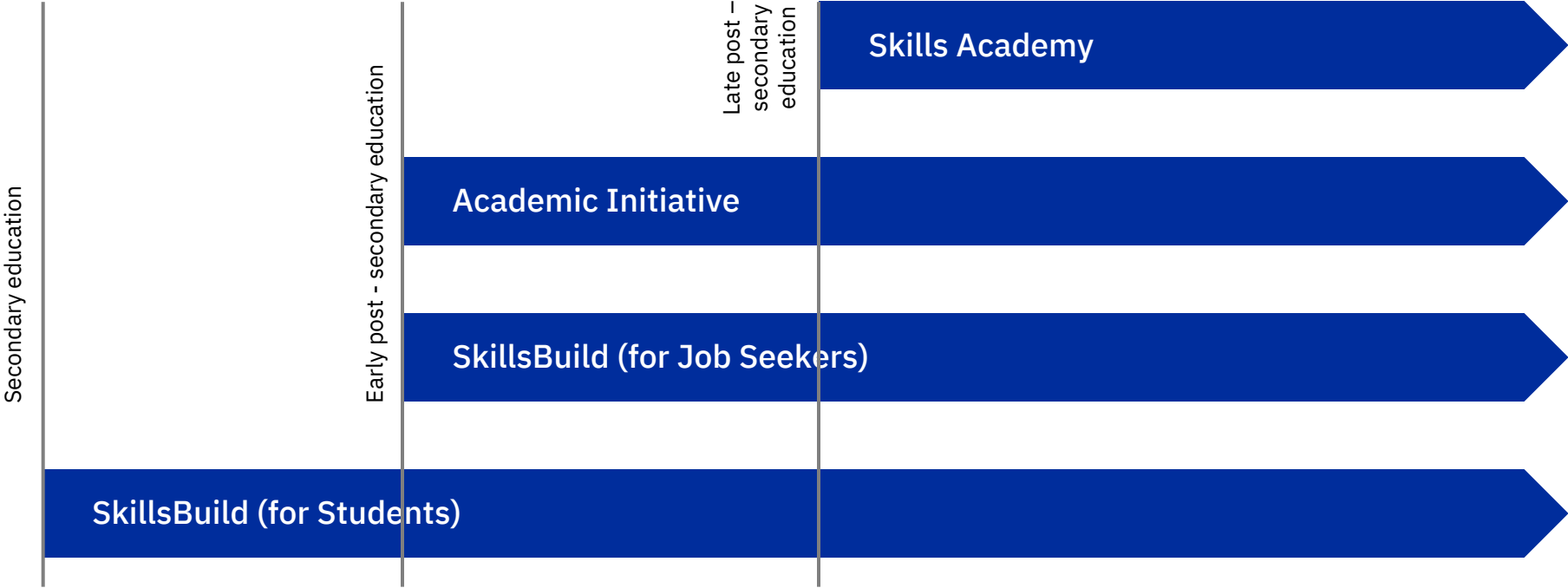
# The Workforce Ecosystem: 5 Pathways to Employment



 Connecting continued learning and work

Let's create ↪  
something that  
changes everything

# One education program – Meeting the learners where they are



# IBM SkillsBuild

A global program powered by market intelligence, partnerships and a digital success team that provides access to employment in the technology sector. [Learn more.](#)

## Target Audience

- Secondary (13+)
- 2–4-year institutions (18+)
- Graduate institutions (18+)
- Job seekers (18+)

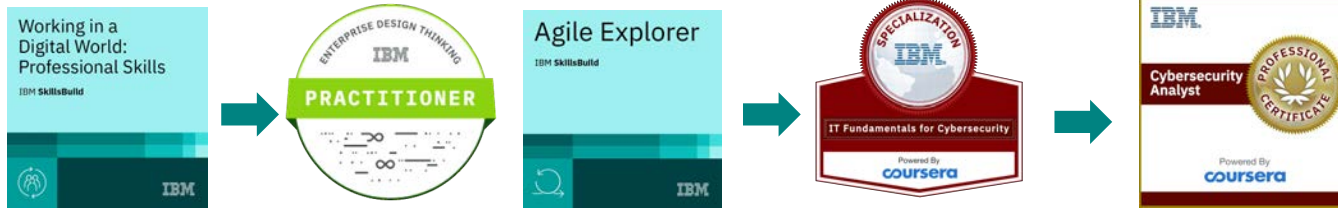
## Partners Include

- Not-for Profits
- Secondary and post-secondary academic institutions
- Government Organizations
- Staffing agencies

## Program Elements

- Learning experiences that map to entry-level technology roles (some with no college degree requirements)
- Learning that aligns with industry-recognized **stacked micro-credentials**
- AI-enabled platform to facilitate discovery, provide recommendations and track learner progress
- Network of IBM and non-IBM Coaches and SME Mentors
- Project-based learning
- Access to apprenticeships and jobs through job fairs and staffing companies

Example of Cybersecurity journey, from learning to credentials



# IBM Academic Initiative

Enables students and faculty at degree-granting, accredited, academic institutions free access to select **IBM software and IBM Cloud access**.

[Learn more](#)

## Target Audience

- Post-secondary students
- Faculty
- Research Staff\*\*

## Partners Include

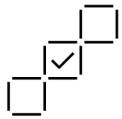
- Accredited academic institutions

## Program Elements

- Access to IBM software required to support hands-on lab experiences
- Access to IBM courseware to incorporate into post-secondary curriculum
- Network of IBM Subject Matter Experts

## Top 3 downloads:

ILOG CPLEX  
Optimization  
Studio



SPSS  
Modeler  
Premium



IBM Cloud  
Feature Code





# IBM Skills Academy

A skills-oriented train-the-trainer program that helps faculty empower students with the right mix of skills needed to excel in today's ever evolving, high demand job market.

[Learn more](#)

## Target Audience

- Faculty

## Partners Include

- Accredited Universities
- Community Colleges

## Program Elements

- Train-the-trainer materials for faculty
- Strategy development to meet academic needs and goals of the students
- Integrated lab experiences
- Network of IBM Subject Matter Experts

22 Badges on AI, Big Data, Business Analytics, Cloud, Data Science, Cybersecurity IBM Mainframe



# P-TECH

P-TECH (Pathways in Technology Early College High School) is a public-school model providing a seamless pathway from high school to college and career. [Learn more.](#)

## Partners Include

- School districts
- Post-secondary academic institutions
- Industries

## Key Innovation

- Skill-based internships & employment
- Coaching & Career conversations
- Workplace Learning

## Program Elements

- Cost-free
- Open enrollment
- Workplace learning experiences that include mentoring, site visits, career panels
- First-in-line for jobs with industry partners
- Curriculum for teachers, delivered through SkillsBuild



# IBM New-Collar

IBM's New-Collar initiative focuses on improving **access to opportunities** for people who come from **non-traditional backgrounds**. In today's modern world, IBM understands that hiring good talent does not just mean hiring someone with a diploma. It is about having the right skills, practical experience, and the determination to succeed.

<https://www.ibm.com/us-en/employment/newcollar>

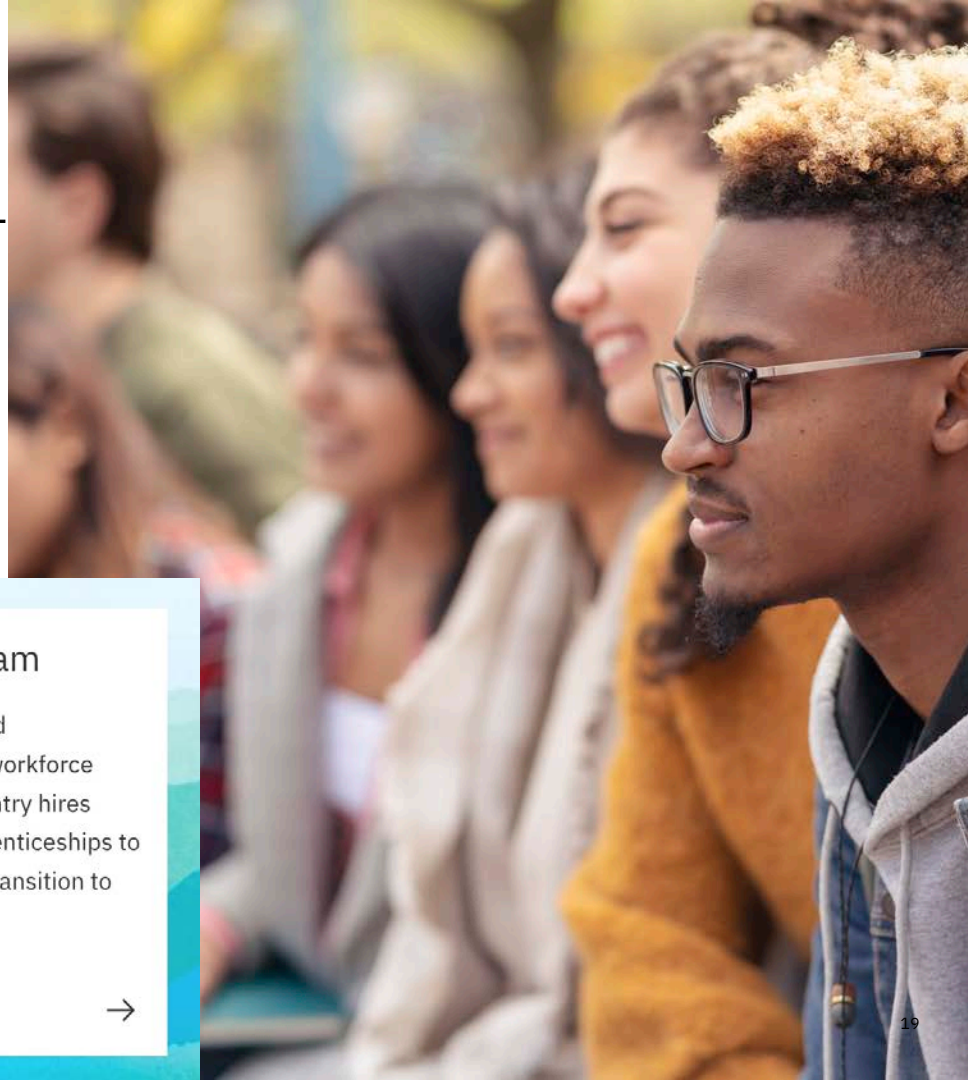
## Apprenticeship Program

Apprenticeship is an experiential "earn while you learn" program that blends on-the-job learning with hands on training to build foundational skills needed for a specific occupation. In apprenticeship, we hire for aptitude and train for skills.



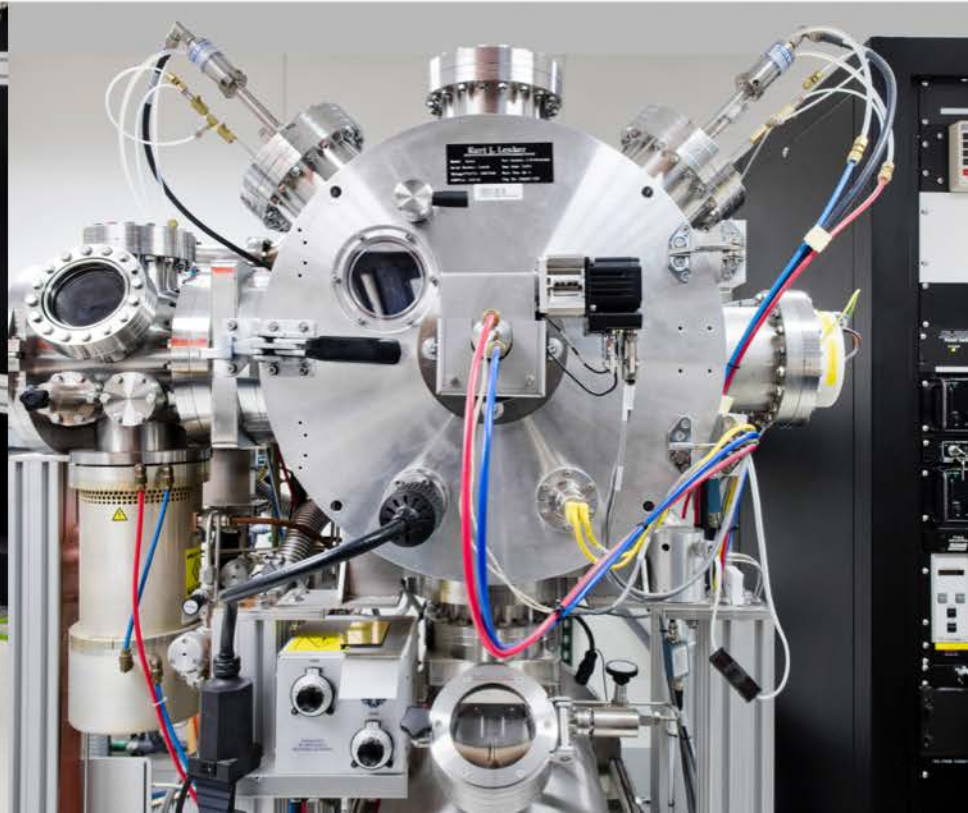
## Tech Re-Entry Program

This program is for experienced technologists re-entering the workforce following a career break. Re-Entry hires participants to participate in time boxed apprenticeships to refresh skills and prepare for transition to full time opportunities.



# Reinventing Careers with IBM Apprenticeships

Creating new pathways to employment for candidates without a degree.



# Current Apprenticeship-able roles at IBM

## Cybersecurity

Junior Cybersecurity Analyst

Hacker (Hardware or Software)

## Data Science

Data Scientist

Junior Data Analyst

## Design

Visual Designer

User Experience Designer

Design Researcher

## Human Resources

Talent Acquisition Coordinator

## Manufacturing and Testing

Mainframe Sys. Verification Tester

System Support Technician

IT Lab Technician

Hardware Design Technician

## Marketing

Marketing Specialist

## Product Management

Associate Product Manager

## Project Management

Associate Project Manager

## Software Development & Support

Software Engineer / Application Developer

Cloud Support Specialist

## System Administration

Network Administrator

Threat Analyst

z/OS Mainframe System Admin

z/OS Mainframe App Developer

## Sales

Technical Solution Specialist

Technical Solution Seller

***Received A.C.E. credit recommendations of upto 48 credit hours***

# IBM Tech Re-Entry Program

## Helping people return to the workforce the right way.

### Six reasons to join the program

Working in IBM is always about impact, inclusion, and infinite experiences. But there are more great reasons to join the Tech Re-Entry program.



The program offers flexibility and ease of transition from your break to getting back to the workforce.



A dedicated mentor will help you get up-to-speed with the environment and new technology.



Working with multi-disciplinary teams will enable you to deliver client-critical solutions.



You have the opportunity to update your skills and expertise as you work on real projects with real impact.



Your community of like-minded re-joiners will support you as you restart your journey together.



The apprenticeship experience could lead to a full-time employment at IBM after you complete the program.

# Neurodiversity

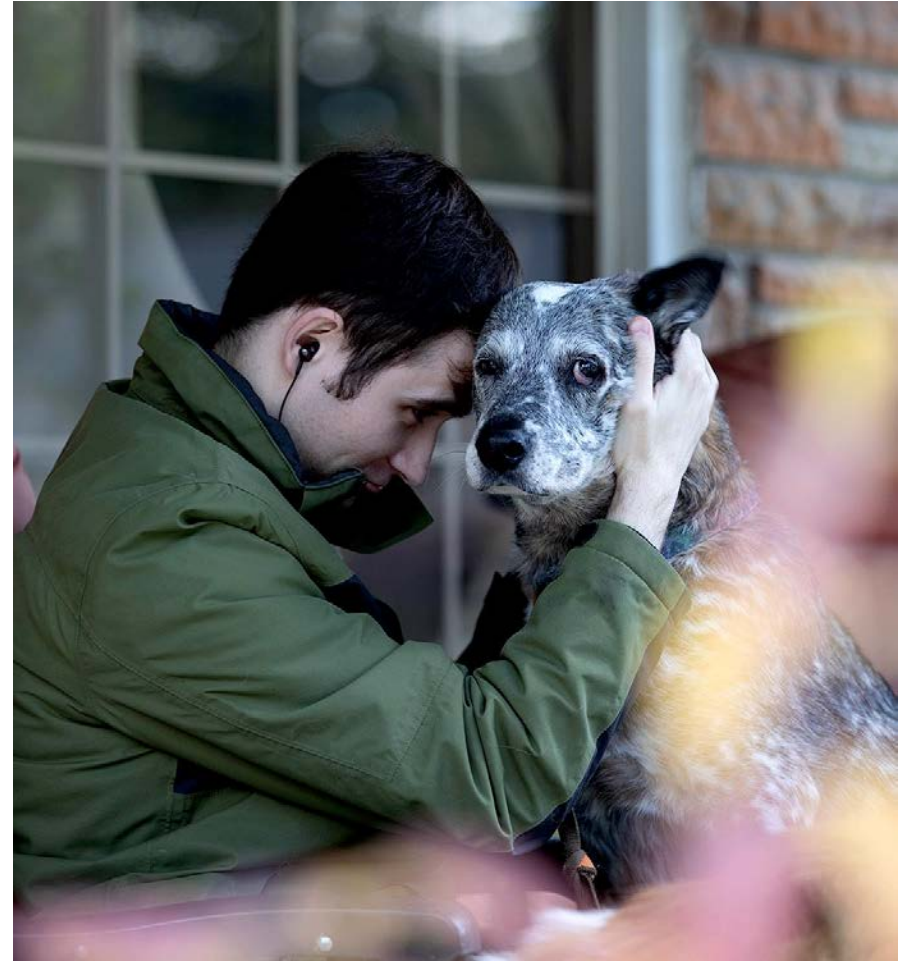
Neurodiversity at IBM (ND@IBM) is a global program that includes hiring, talent development and enablement for neurodivergent talent.

## Program Benefits

Increases Community Engagement

Enhances Workforce

Drives Innovation



# In summary

- Be Collaborative
- Practice Transparency
- Adopt a Growth Mindset



In this age of accelerations, everyone is going to have to raise their game in the classroom and for their whole lifetime – *Thomas Friedman*



# Resources

- The enterprise guide to closing the skills gap – [IBM Study](#)
- IBM New Collar Program – [Learn More](#)
- IBM Open Badge – [About the program](#)
- Build your future in technology for free : [IBM SkillsBuild](#)
- The American Upskilling Study : [Gallup Report](#)
- Defining the skills citizens for future world of work : [McKinsey](#)
- Creating a school system that works for all : JFF – [The Big Blur](#)
- The Future of Jobs – [World Economic Forum](#)
- To build the workforce of the future – [World Economic Forum](#)
- The New Foundational Skills of the Digital Economy : [Burning Glass Report](#)

**IBM**