



**NJ PATHWAYS**  
**TO CAREER OPPORTUNITIES**  
Aligning Education to Build an Innovative Workforce  
**SUMMIT**

June 7 & 8, 2023

Bally's Atlantic City  
Hotel & Casino

# TODAY'S AGENDA

## Day 1

### **The Importance of Pathways and the NJ Pathways to Career Opportunities Initiative**

*Aaron Fichtner, Ph.D. (President, New Jersey Council of County Colleges)*

### **America's Hidden Economic Engines**

*Rachel Lipson (Co-Author, America's Hidden Economic Engines and Co-Founder, Former Director, The Project on Workforce at Harvard)*

*Moderated by Dr. Aaron Fichtner (President, New Jersey Council of County Colleges)*

### **Pathways in a Changing World: Session 1 Stackable Credentials**

*Dr. Holly Zanville (Co-Lead, Credentials As You Go and Research Professor and Co-Director, Program on Skills, Credentials & Workforce Policy, George Washington University)*

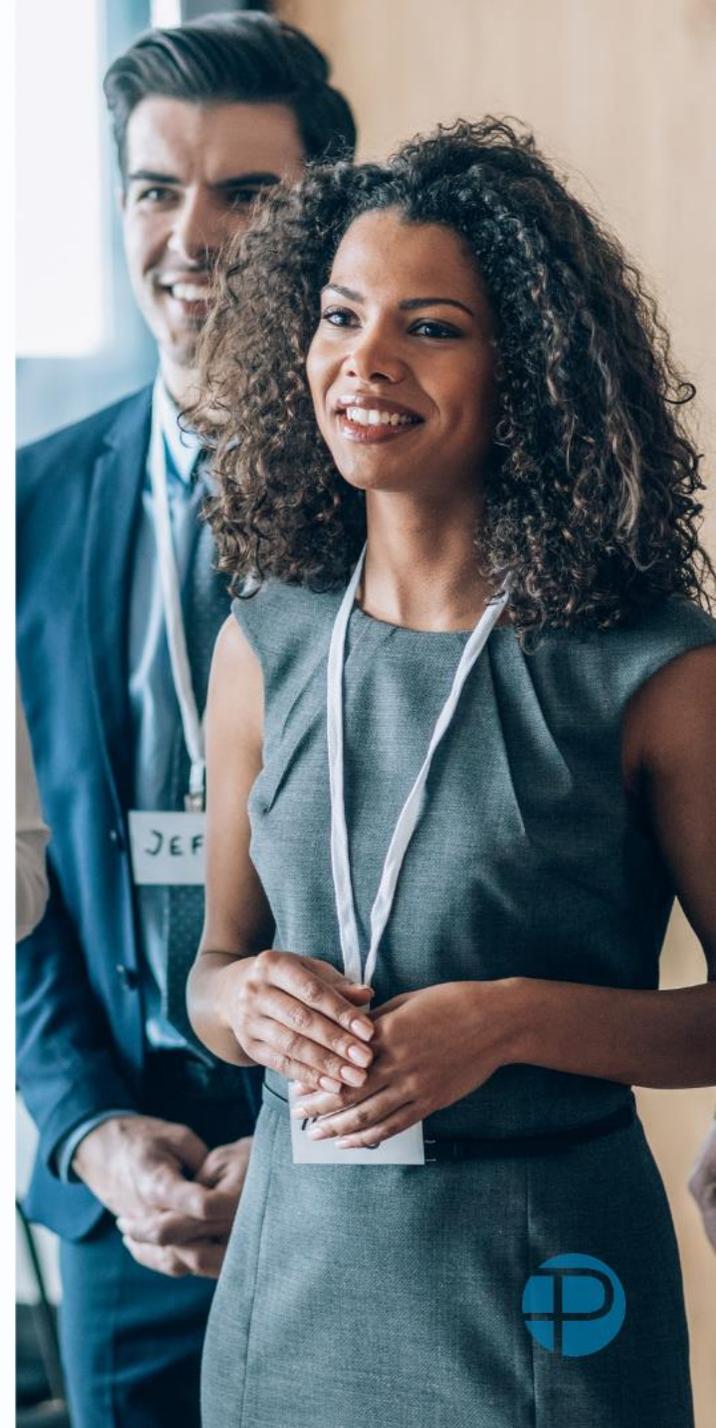
*Moderated by Catherine Starghill, Esq. (Executive Director, NJ Community College Consortium for Workforce & Economic Development)*

### **Pathways in a Changing World: Session 2 Work-Based Learning and Apprenticeships**

*Dr. Annelies Goger (Fellow, The Brookings Institution)*

*Moderated by Maria Heidkamp (Chief, Innovation and Partnerships, New Jersey Council of County Colleges)*

### **Reception & Dinner**





# WELCOMING REMARKS

**Dr. Michael McDonough**

President

*Raritan Valley Community College*





# WELCOMING REMARKS

**Michele Siekerka, Esq.**

President and CEO

*New Jersey Business & Industry  
Association*





# THE IMPORTANCE OF PATHWAYS AND THE NJ PATHWAYS TO CAREER OPPORTUNITIES INITIATIVE

**Aaron Fichtner, Ph.D.**

President

*New Jersey Council of  
County Colleges*



# Foundation & Vision

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This vision is focused both on increasing the attainment of post-secondary industry credentials and degrees to meet the state's **credential attainment** goal of 65x25 and addressing persistent and troubling **equity gaps** in the state's economy. The ultimate goal is to help more individuals achieve a family-supporting career.

Ultimately, we want to ensure that more New Jerseyans are prepared to:

- Have family supporting careers
- Be prepared to thrive and contribute in a diverse society and democracy
- Have fulfilling lives



# Foundation & Vision

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1. Build strong partnerships with businesses and labor unions

2. Ensure that high school students have a clear path to a postsecondary credential or degree

3. Ensure that community college students have a path to further education

4. Ensure that credential programs are responsive to the changing needs of the economy

5. Create pathways to credentials and degrees for adults through partnerships with community based organizations and workforce development organizations

6. Create new on-ramps to community college degree programs through pathways from non-credit programs and PLA and partnerships with employers

7. Enhance our capacity to use data to inform the development of pathways



# Foundation & Vision

## STATEWIDE INCLUSIVE COLLABORATIVES

### HEALTH SERVICES

### TECHNOLOGY & INNOVATION

### INFRASTRUCTURE & ENERGY

### MANUFACTURING & SUPPLY CHAIN MANAGEMENT

## CENTERS OF WORKFORCE INNOVATION

Patient Care

Data Science

Renewable Energy

Manufacturing  
Production  
& Engineering

Health Care  
Technology  
& Administration

Cybersecurity

Construction

Supply Chain  
Logistics

Programming  
& Software  
Development

Research  
& Development



**GIVE US  
YOUR  
FEED-  
BACK**





# AMERICA'S HIDDEN ECONOMIC ENGINES

## **Rachel Lipson**

Co-Author

*America's Hidden Economic Engines*

Co-Founder, Former Director

*The Project on Workforce at Harvard*

Moderator

## **Aaron Fichtner, Ph.D.**

President

*New Jersey Council of County Colleges*



# AMERICA'S HIDDEN ECONOMIC ENGINES

How **COMMUNITY COLLEGES**  
Can Drive **SHARED PROSPERITY**



**Rachel Lipson**

June 7, 2023

NJ Pathways to Career  
Opportunities Summit

# Overview

Project background and motivation

Key takeaways

Discussion

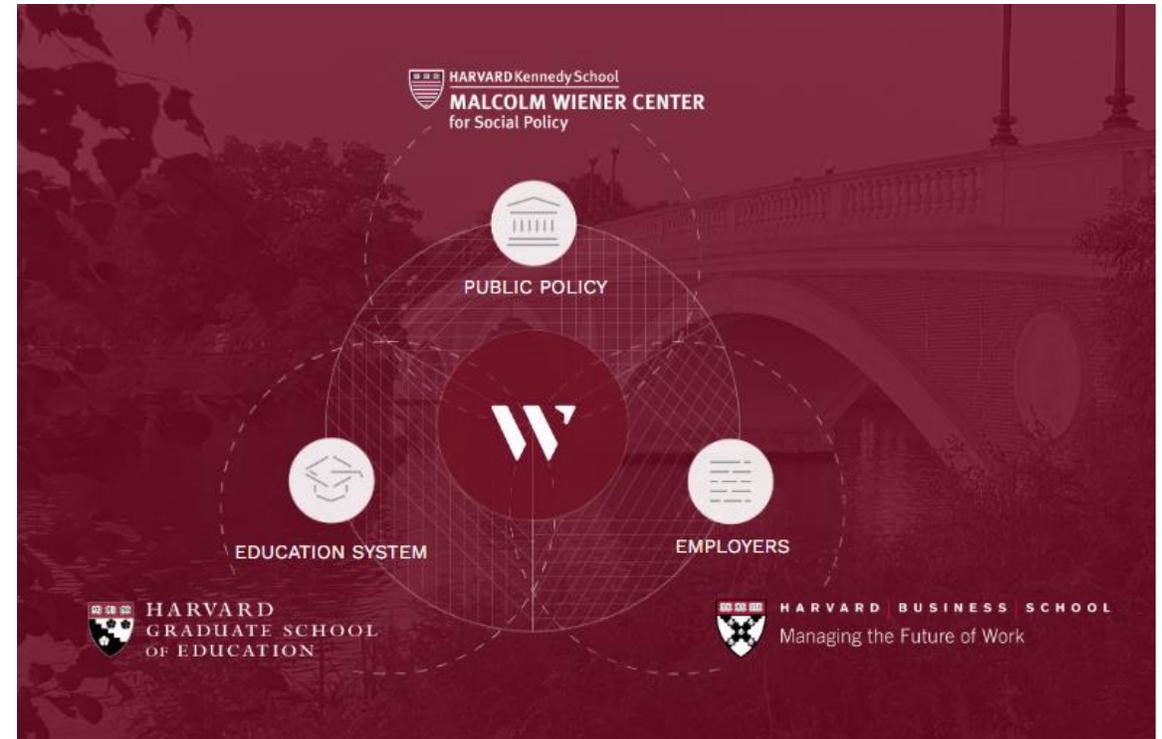
## About the project

Harvard's Project on Workforce was founded in 2019 as a collaboration between Harvard's Kennedy School of Government, Business School, and Graduate School of Education. Our mission is to build a research agenda for a postsecondary education system of the future with

- More and better pathways to economic mobility
- Smoother transitions between education and careers

***America's Hidden Economic Engines*** project -  
flagship effort in our community college portfolio

- Project launched in Summer 2021
- Case writing Fall '21-Spring '22
- June 28, 2022 convening with College Presidents plus cross-sector teams from six states



## Our goals

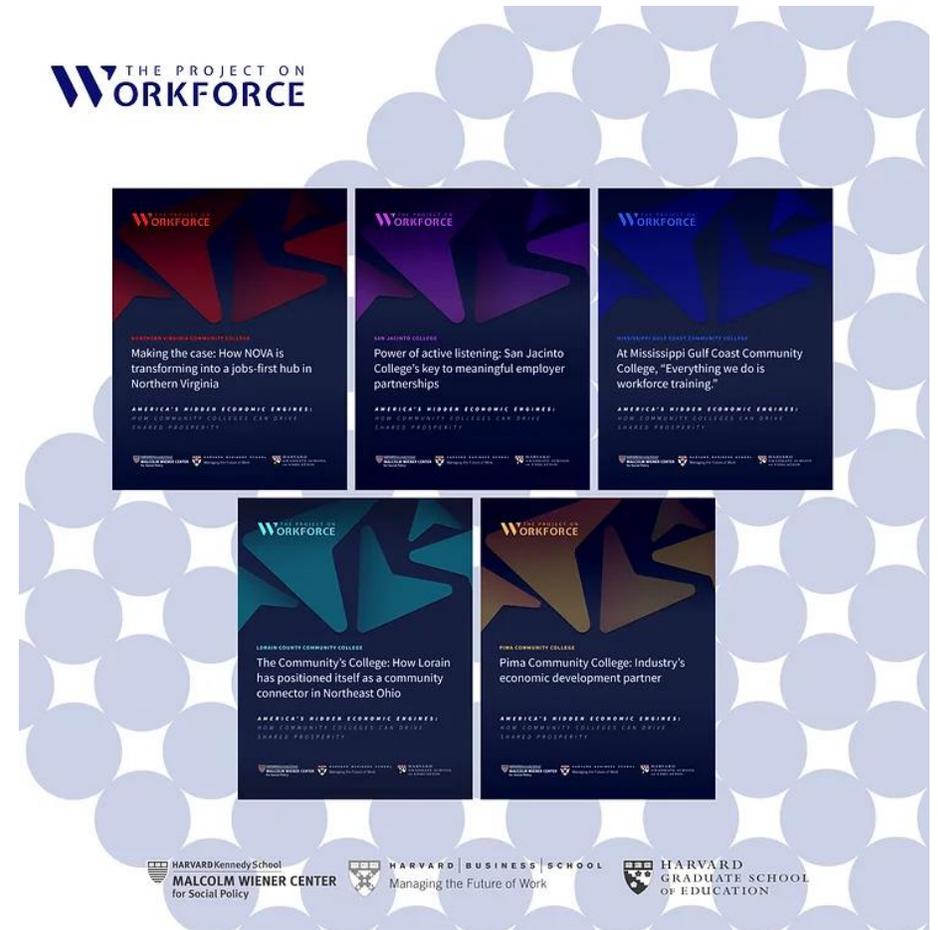
- **Practitioner-facing:** Focus not just on “*what*” colleges have done to support career goals of students and positioned themselves as key players in the regional economy, but also **how** they have done it
- **Multiple audiences:** Colleges, government, business, community partners. Book contains lessons for college leaders aiming to strengthen their economic development mission, but also for business and public policy stakeholders to understand what is required for community colleges to be engines of economic mobility
  1. Show what is possible when community colleges embrace their economic and workforce development mission.
  2. Provide actionable, detailed “how-to”s
  3. Guide future public policy and investment

## College selection

Regional Characteristics	Student Characteristics	Performance data
U.S. region	Race/ethnicity	Graduation rates
Urban/Suburban/rural	Age	Economic mobility (moved up 2+ income quintiles)
Enrollment size	Full-time/part-time	Median earnings (2, 5, 10 years post graduation; compared to HS graduates in region)
Key industries	Credit/non-credit enrollment	Notable national recognition
Median income, educational attainment in county	% receiving Pell grants	

## Case study institutions

College	Region	Metro Area	Enrollment* (2021-2022)
Lorain County Community College	Midwest	Cleveland-Elyria, OH	14,322
Mississippi Gulf Coast Community College	Southeast	Gulfport-Biloxi, MS	20,282
San Jacinto Community College	South	Houston-The Woodlands-Sugar Land, TX	44,947
Pima Community College	Southwest	Tucson, AZ	33,393
Northern Virginia Community College	Mid-Atlantic	Washington-Arlington-Alexandria, DC-VA-MD	72,798



\*Enrollment data reflects counts of credit, noncredit, and dual enrollment students provided independently by the institutional research offices at each case college. Differing data definitions or collection methodologies across institutions could affect counts.

# **What will it take:** Igniting the Community College Engine

## Building the Blueprint: Regional Kingmakers

### Outward-facing leadership

Senior executive teams represented in all key economic decision-making entities

Picking the right industries and jobs

Mobilizing new capital

Building true talent supply chain relationships

Activating the entrepreneurial ecosystem

**San Jacinto's Chancellor Advisory Councils:** co-chaired by C-suite leaders from regional employers and the college's chancellors.

**NOVA** was a lead institution in Virginia's winning bid to secure Amazon HQ2

**Lorain County Community College** built a successful microelectronics program almost a decade before Intel announced it was coming to Ohio

**Pima Community College** participates in all economic development attraction meetings in Tucson area

# Building the Blueprint: Institutional Transformation

## Integrating Education and Career

Functional reorganizations

Non-credit as an incubator and blurring of credit and non-credit

Flexible on-ramps and off-ramps, including fast-track programs

Innovative career advising, including faculty and staff role, classroom-integrated models, cohort-based models

Universal work-based learning

In-house labor market data expertise

**MGCC Schools Model:** co-chaired by C-suite leaders from regional employers and the college's chancellors.

**San Jacinto** launched mandatory student success course and reduced share of general studies by almost half in five years

**Pima** guarantees that 100 percent of its learners will have a work-based experience, many of which are paid

**NOVA** and **Pima** created horizontal business development units that create single points of entry for employers

**LCCC's** new fast-track program is under 16 weeks, free for learners and attracted new types of learners

## Building the Blueprint: The Next Frontier

### If you build it, will they come?

Shifting demographics and reforms for working learners (scheduling, remote and hybrid learning, paid work experiences)

Equity agenda and tackling occupational segregation

Future of work implications: transferable and soft skills; changing geography of work

Fixing the funding model

Rethinking how we define community college success

**Virginia's FastForward program** funds high-wage, short-term programs in priority fields for the state

**MGCC** CTE Health Metrics system disaggregates all program success data by gender, race and ethnicity

**Pima CC** invested in a non credit registration system that integrates with their data warehouse so they can collect rich information on both credit and non credit learners

**Ohio's** Community College Acceleration Program is using SNAP E&T funds to scale the CUNY ASAP wraparound support model in the stage

<https://youtu.be/JGAUxl5tcaE>



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**RACHEL LIPSON**

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 @rachel\_lipson

 THE PROJECT ON  
**WORKFORCE**

 HARVARD Kennedy School  
**MALCOLM WIENER CENTER**  
for Social Policy

 HARVARD BUSINESS SCHOOL  
Managing the Future of Work

 HARVARD  
GRADUATE SCHOOL  
OF EDUCATION

# Q & A



**GIVE US  
YOUR  
FEED-  
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# NETWORKING BREAK





# PATHWAYS IN A CHANGING WORLD: SESSION 1

## STACKABLE CREDENTIALS

### **Dr. Holly Zanville**

Co-Lead

*Credentials As You Go*

Research Professor and Co-Director, Program on  
Skills, Credentials & Workforce Policy

*George Washington University*

Moderator

### **Catherine Starghill, Esq.**

Executive Director

*NJ Community College Consortium for  
Workforce & Economic Development*





# NJ Pathways to Career Opportunities Summit

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## Pathways in a Changing World: Session 1

June 7, 2023

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Holly Zanville

Credential As You Go /

Learn & Work Ecosystem Library

Working to improve education and employment outcomes for all learners





# The Journey

Where do you want to go?

To a fair learn-and-work ecosystem for all Americans

Too many words. Try again.

To an incremental credentialing system

Searching for location  
“Incremental Credentialing system” – found it.

A system in which the primary focus is placed on traditional academic degrees as the main qualification for employment and career advancement. Emphasis is on acquiring a degree from an accredited educational institution such as a college or university, and using that degree as key credential for securing employment. Individuals typically follow a linear path where they pursue a degree in a specific field of study, accumulate knowledge and skills through academic coursework, and then enter the workforce with expectation that their degree will provide them with better job prospects and advancement opportunities. Employers often prioritize candidates with higher educational qualifications. Advancement within an organization may be tied to obtaining further degrees or higher-level qualifications. System tends to place strong emphasis on theoretical aspects of learning, focusing on academic subjects and disciplines. It often assumes a degree is a reliable indicator of an individual's knowledge, skills, and competence in a particular field.

What is the starting location?

Too many words. Try again.

From a degree-centric system

Searching for start location  
“degree-centric system” to plan the trajectory - found it.

The journey: Go from a degree-centric system to an incremental credentialing system.  
Push “start” for directions





# Four Drivers of Change

- Degree-Centric System
- Equity
- Credential Expansion
- 21st Century Workforce Needs



## **National Student Clearinghouse Some College, No Credential Student Outcomes**

Some College, No Credential (SCNC) population reached 40.4 million. This total was up 1.4 million from 39.0 million the prior year.

Lack of re-enrollment + 2.3 million more recent stop-outs drove this large growth.

All 50 states and D.C. experienced growth in SCNC population.

~2.9 million (7.3%) are “potential completers” who already made at least 2 years’ worth of academic progress up until their last enrollment.

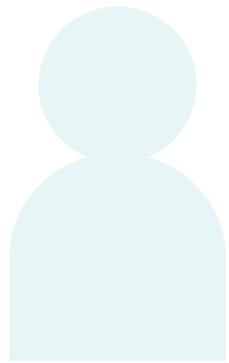
**Why don't we recognize learning acquired along the education and career journey?**

**Is the only valuable learning a college degree or certificate?**

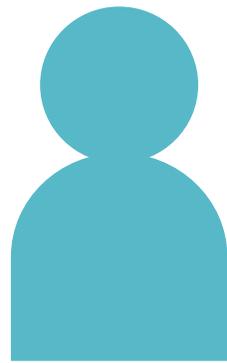
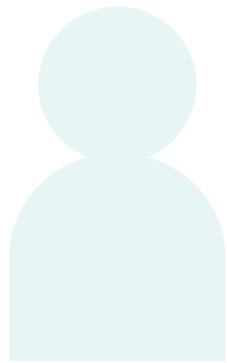
**It is in a degree-centric system.**

**It is not so in an incremental credential system.**

# Postsecondary Attainment in the U.S.



2 out of 6  
Upper secondary or below



1 out of 6  
some college/  
no credential



3 out of 6 have a college credential

White – 71%  
Black – 10%  
LatinX - 10%  
Asian – 9%

Source: Data based on 224.5M adults 25 years and older (Acquired from U.S. Census Bureau 2021)



Counting U.S.  
Postsecondary  
and Secondary  
Credentials



2022

## 1,076,358 Unique Credentials in U.S.

18 detailed credential categories across 4 types of credential providers:

### POSTSECONDARY EDUCATIONAL INSTITUTIONS

350,412 degrees, certificates

### MASSIVE OPEN ONLINE COURSE (MOOC) PROVIDERS

13,014 course completion certificates, microcredentials, online degrees from foreign universities

### NON-ACADEMIC PROVIDERS

656,505 badges, course completion certificates, licenses, certifications, apprenticeships

### SECONDARY SCHOOLS

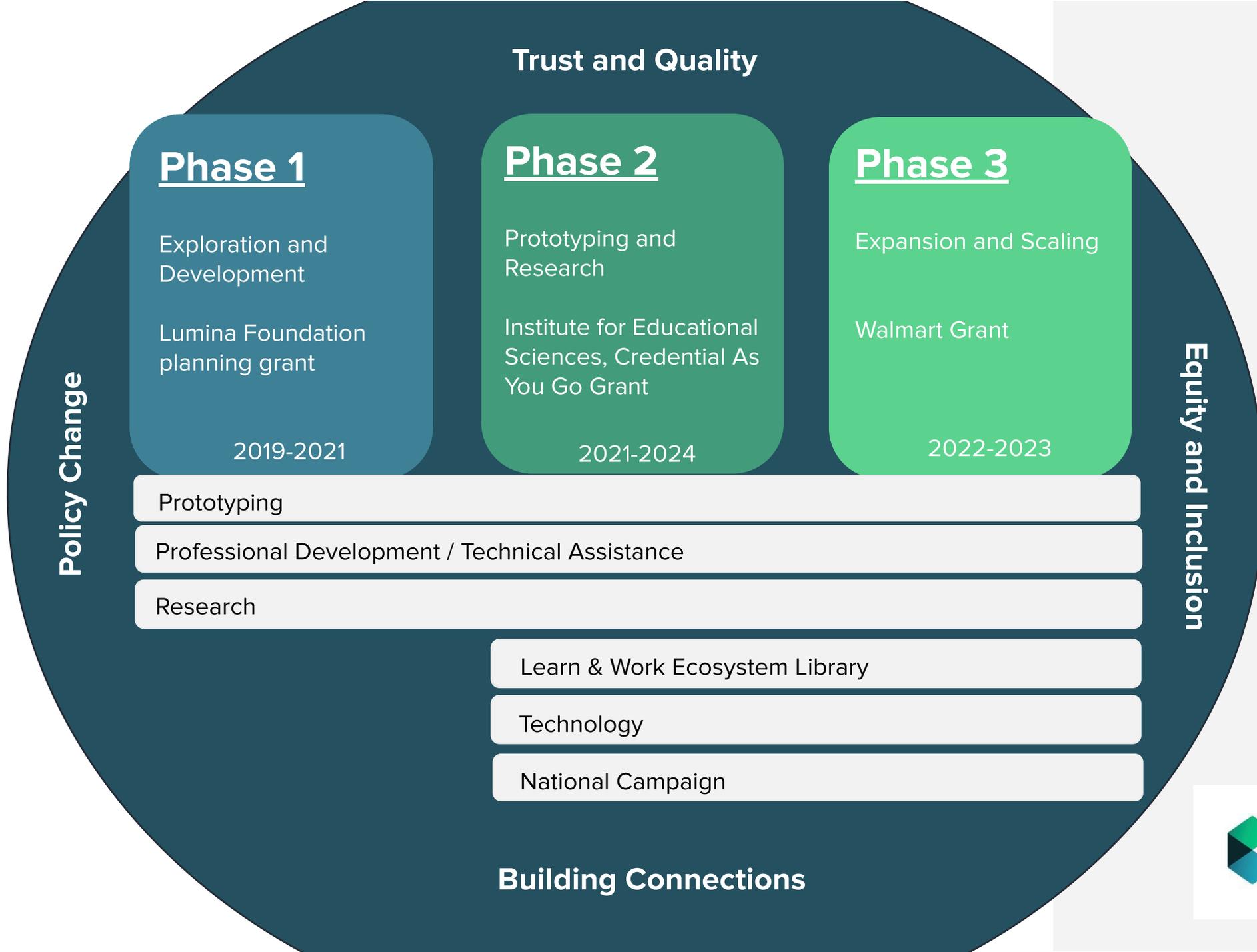
56,179 diplomas from public and private secondary schools, alternative certificates from secondary schools, high school equivalency diplomas





A movement to develop a nationally adopted incremental credentialing system that improves education and employment outcomes for all learners.





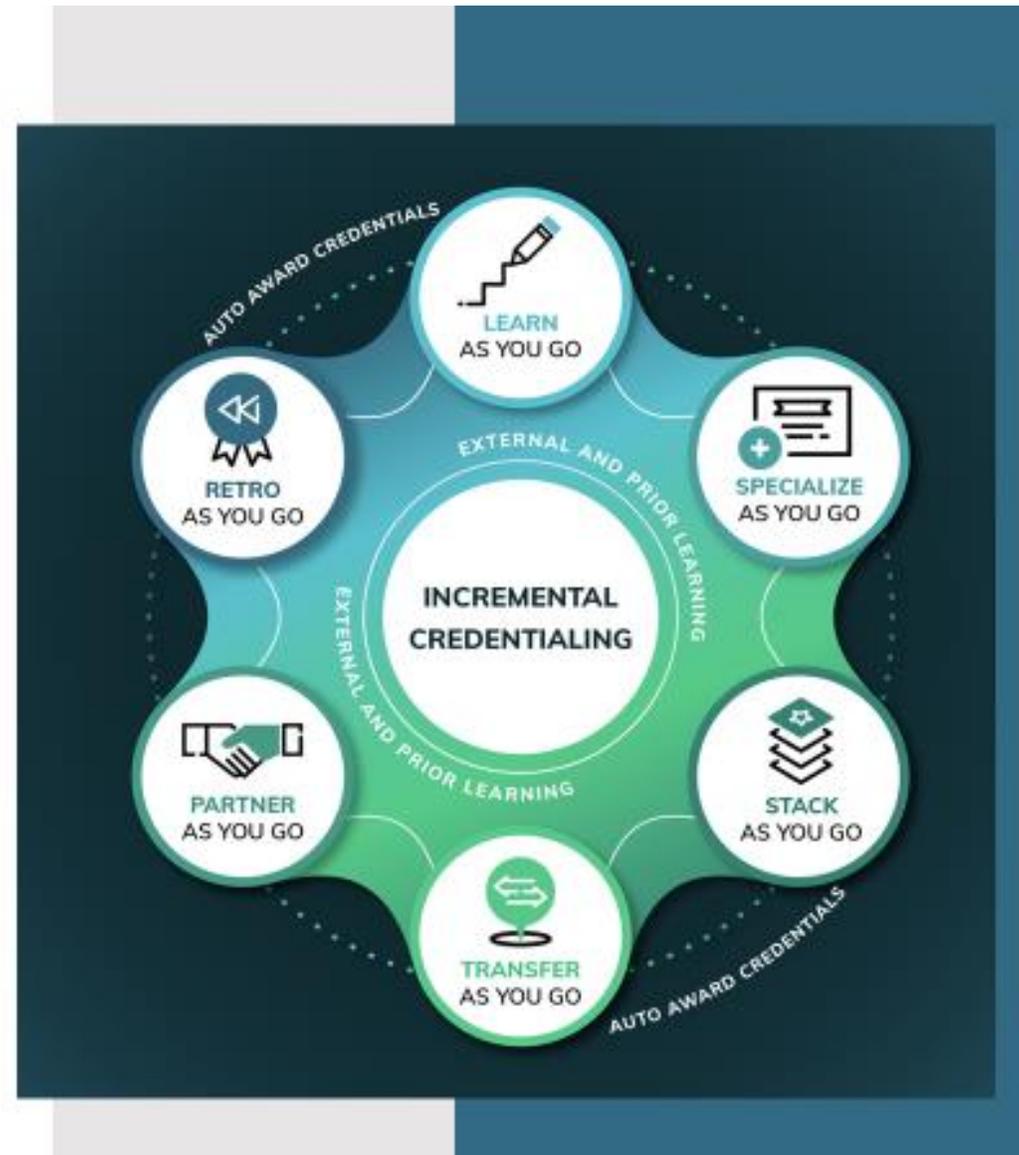
# Nine Bodies of Work

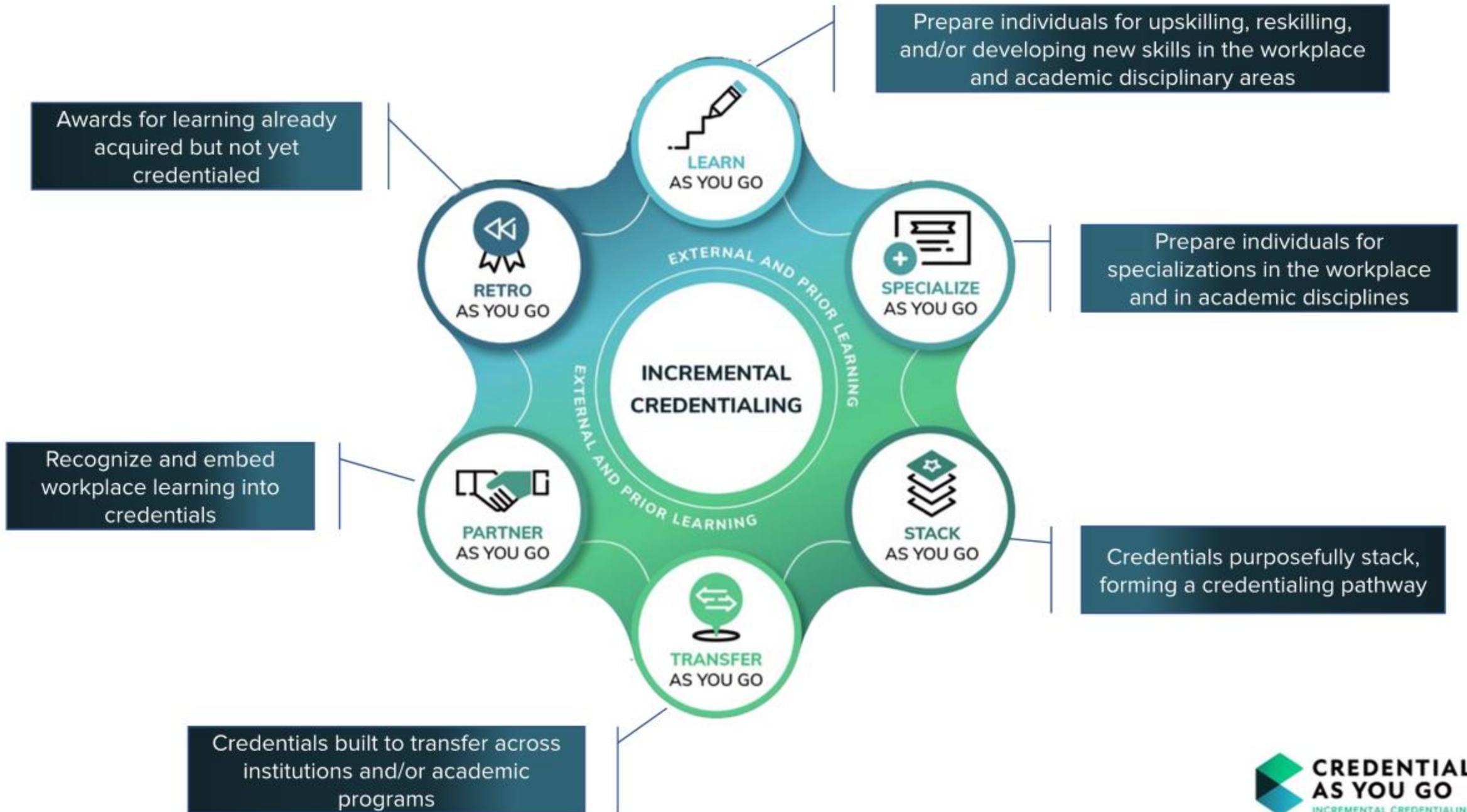




# Incremental Credentialing Framework

The incremental credentialing process formally recognizes learning that individuals acquire along the way so that they can be recognized for employment and further education. The framework provides six approaches to developing and implementing incremental credentials.

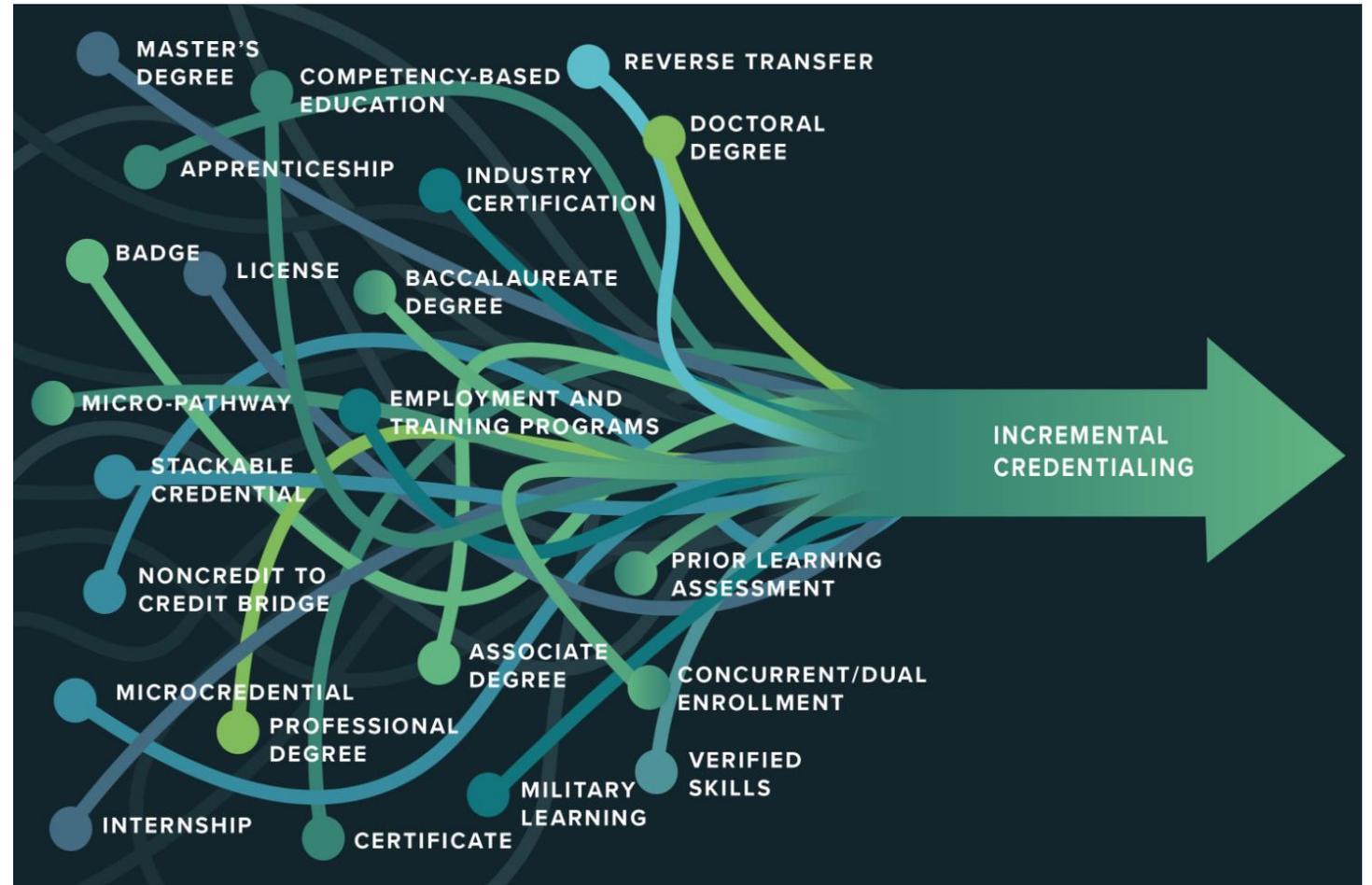




# What are Incremental Credentials?

**Incremental Credentials** capture learning as it is acquired along the learning pathway and formally recognizes and connects that learning to a larger context of education and work.

The **purpose of incremental credentials** is to ensure learners are recognized for what they know and can do as they acquire the learning — and not leave learners without formal documentation of that learning.



Did you miss the Feb. 1 Summit on Higher Ed Quality Assurance & Incremental Credentialing? Click here!

[Learn More](#)

X



[ABOUT](#) ▾

[TOOLS AND RESOURCES](#) ▾

[LEARN AND WORK ECOSYSTEM](#) ▾

[RESEARCH](#) ▾

[NEWSROOM](#) ▾



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— INCREMENTAL CREDENTIALING

# Improving Education and Employment Outcomes For All Learners

Moving to a nationally adopted incremental credentialing ecosystem that improves education and employment outcomes through an array of credentials, including degrees, that document what learners know and can do

[LEARN MORE](#)

[CONNECT](#)

<https://credentialasyougo.org>

# Playbooks at Credential As You Go Website - More Soon

The screenshot displays a web browser window at the URL <https://credentialasyougo.org/tools-and-resources/>. A dark blue banner at the top of the page reads "Check out the \*NEW\* Credential As You Go Playbooks!" with a "View Now" button. Below the banner, five white cards with rounded corners are arranged in a grid. Each card features a green document icon, a date, a title, a short description, and a "READ MORE" link with a right-pointing arrow.

- Card 1 (Top Left):** Dated **MAR 23, 2023**, titled **Building Incremental Credentials**. The text states: "Incremental credentials capture learning as it is acquired, formally recognize that learning, and connect it to a larger context of education and work." The "READ MORE" link is green.
- Card 2 (Top Middle):** Dated **MAR 23, 2023**, titled **Incremental Credentialing Framework**. The text states: "The Incremental Credentialing Framework provides six approaches to developing and implementing incremental credentials. Based on research, these six approaches" The "READ MORE" link is green.
- Card 3 (Top Right):** Dated **APR 19, 2023**, titled **Policy in Incremental Credentialing**. The text states: "Policy and practice in incremental credentialing go hand in hand. Public colleges and universities will find it difficult to develop and implement incremental credentials" The "READ MORE" link is green.
- Card 4 (Bottom Left):** Dated **MAY 05, 2023**, titled **Building a Communications and Marketing Strategy in a State or Institution for Incremental Credentialing**. The text states: "Communications and marketing are critical components in the effort to transform the nation's degree-centric postsecondary model to an incremental credentialing system. To" The "READ MORE" link is green.
- Card 5 (Bottom Right):** Dated **MAY 05, 2023**, titled **Building a Communications and Marketing Plan for Individual Incremental Credentials**. The text states: "Communications and marketing are critical in the effort to transform the nation's degree-centric postsecondary model to an incremental credentialing system. To" The "READ MORE" link is green.

The browser's taskbar at the bottom shows the system tray with a temperature of 83°F, "Partly sunny", and the date/time "8:46 PM 6/3/2023".

# Learn & Work ECOSYSTEM LIBRARY

A web-based library that collects, curates, and coordinates resources to support the learn-and-work ecosystem.

 [Search](#)

- ABOUT
- KNOWLEDGE
- INITIATIVES
- ALLIANCES & INTERMEDIARIES

## Making information easier to find, use, and maximize for diverse stakeholders.



### Knowledge

12 key components (building blocks), 75 subcomponent topics, 86 glossary terms in learn-and-work ecosystem

- [Components](#) →
- [Topics](#) →
- [Glossary](#) →

### Initiatives



149 key projects working to improve the learn-and-work ecosystem.

[Learn More](#) →

### Alliances & Intermediaries



241 alliances, networks & intermediary organizations focused on components of the ecosystem.

[Learn More](#) →

# Learn & Work

▪ ECOSYSTEM LIBRARY ▪

A web-based library that collects, curates, and coordinates resources to support the learn-and-work ecosystem.

Search the Library... Search

## ABOUT

- Library Collections Management Statement (working draft)
- The Why, The What, The Who
- 2023 Library Advisory Board
- Library Team
- Stakeholder Groups / Searches
- Partnerships & Sponsorships
- Newsroom
- Creative Commons License

## KNOWLEDGE

## INITIATIVES

## ALLIANCES & INTERMEDIARIES

More About Us

View the Archive

View Library Walk-Through

## Search By Stakeholders Group

Note: Searching by Stakeholder Groups is still in development

The Library enables you to search by stakeholder group in order to sort information that may be especially relevant to the interests of particular groups. Check below which stakeholder group(s) you are a part of, and the Library will suggest content that may be of most interest.

- Accreditors / Quality Assurance Entities
- Community Colleges
- Diversity, Equity & Inclusion (DEI)
- Finance
- International
- Learners, Students
- Military
- Policymakers
- Researchers
- Student Services
- Universities
- Career Advisers, Coaches, Navigators
- Database Experts
- Employers
- Intermediaries
- Journalists
- Learning Verification & Transcribing
- Philanthropy
- Prison education
- Schools (K-12)
- Third-Party Providers
- Workforce Agencies

# Learn & Work

ECOSYSTEM LIBRARY

A web-based library that collects, curates, and coordinates resources to support the learn-and-work ecosystem.

- ABOUT
- KNOWLEDGE
- INITIATIVES
- ALLIANCES & INTERMEDIARIES

## KEY INITIATIVE

# New Jersey Pathways to Career Opportunities Initiative

External Link

New Jersey's Community Colleges and the New Jersey Business & Industry Association (NJBIA) launched the [New Jersey Pathways to Career Opportunities program](#) in December 2021. The initiative is aligning employers, industry associations, labor unions, educational institutions, and workforce development partners to provide students and workers with structured pathways to find career opportunities—and to ensure that employers have access to a highly skilled workforce to meet critical labor market needs.

The Pathways initiative is led by Collaboratives that are focusing on four industries that are the foundation of the state's economy: (1) Health Services; (2) Technology and Innovation; (3) Infrastructure and Energy; and (4) Manufacturing and Supply Chain Management. Each Collaborative is working to obtain high-quality, timely labor market information about the changing needs of employers, and to build an ecosystem of education and training partners that encourage collaboration and information sharing.

Ten Centers of Workforce Innovation are supporting the Collaboratives. All 18 of New Jersey's Community College partners, as well as high schools, four-year colleges and universities, and community-based training providers across the state are involved. Their common goal is to align and improve existing curricula, prioritize industry-valued [credentials](#), and develop transfer agreements.

Deliverables for the Pathways initiative include:

- development of a state strategic workforce plan for each of the four industries
- identification of labor market demand and industry-valued credentials for each industry
- development of detailed career pathway maps to guide the work
- dissemination of the career pathway maps to students and workers at all levels.

### Resources

- [Video featuring education, business and legislative leaders](#)
- [org](#)

### Partners

The logo consists of a dark blue square with a vertical orange bar on the left side. The text 'Learn & Work' is written in a large, white, serif font, and 'ECOSYSTEM LIBRARY' is written in a smaller, white, sans-serif font below it.

**Learn  
& Work**  
ECOSYSTEM  
LIBRARY

A yellow rectangular box with a black border, containing text.

**Library Walk-Through  
4-Minute Video**

<https://youtu.be/PVL6QVuz-lk>

# Learn & Work

▪ ECOSYSTEM LIBRARY ▪

# Resources on Terminology

## Credential As You Go Dictionary Definitions & Use of Key Terms & Concepts in Incremental Credentialing

A screenshot of a web browser displaying the 'Glossary' page of the 'Learn & Work Ecosystem Library'. The page has a dark blue header with the library's name and a search bar. The main content area is white with a light blue border. It lists several terms: 'Academic advising', 'Accreditation', 'Adult learners', and 'Alternative Credential Platforms', each followed by a brief definition. The browser's address bar shows the URL 'https://learnworkecosystemlibrary.com/glossary/'. The Windows taskbar is visible at the bottom, showing the time as 8:53 PM on 6/3/2023.

**Learn & Work ECOSYSTEM LIBRARY**

A web-based library that collects, curates, and coordinates resources to support the learn-and-work ecosystem.

Search the Library... Search

**ABOUT**

**KNOWLEDGE**

**INITIATIVES**

**ALLIANCES & INTERMEDIARIES**

### Glossary

[Print/Download Page](#)

#### Academic advising

Academic advising is the collaborative process by which students engage with a member of their institution (professor, mentor, or advisor) to receive direction or advice on academic or personal decisions. The purpose of this process is to counsel or inform students, so they get the most of their college experience. Advising includes establishing educational goals or milestones based on the student's interests and intentions.

#### Accreditation

According to the U.S. Department of Education, accreditation is the process of assessment meant to improve academic quality and institutional accountability by an established set of standards to ensure a basic level of quality. Accreditation covers both the initial and ongoing approval of an educational institution or program. Entire schools or institutions can be accredited (referred to as institutional accreditation), as can individual schools, programs, or departments (referred to as specialized or programmatic accreditation). Accreditation can be conducted on the national, state, or private organizational levels. The accrediting agency establishes an agreed-on set of standards, evaluates organizations or institutions, and then re-evaluates the provider on a set schedule—typically, every five or ten years.

#### Adult learners

Adult learners are known by a variety of names: nontraditional students, adult students, returning adults, adult returners, mature learners, comebackers. Common characteristics: usually 25 or older; delayed entering college for at least one year following high school; usually employed full-time; often have a family and dependents to support; may have started college as a traditional student but needed to take time off to address other responsibilities; looking to enhance their professional lives or may be switching careers; have more experience than traditional students, having already started a career or served in the military; more mature, independent, and motivated than traditional students.

#### Alternative Credential Platforms

Nontraditional and digital credentials are offered through a higher education institution's partnerships with approved



**2022 Cohort**

- 1. Appalachian State University - Boone, NC
- 2. Caldwell Community College - Hudson, NC
- 3. Colorado Department of Higher Education - Denver, CO
- 4. Colorado State University Global Campus - Aurora, CO
- 5. Colorado State University, Fort Collins - Fort Collins, CO
- 6. Colorado State University, Pueblo - Pueblo, CO
- 7. East Carolina University - Greenville, NC
- 8. Fayetteville Technical Community College - Fayetteville, NC
- 9. North Carolina Community College System - Raleigh, NC
- 10. Pitt Community College - Greenville, NC
- 11. Red Rocks Community College - Lakewood, CO
- 12. SUNY Empire State University - Saratoga Springs, NY
- 13. SUNY Mohawk Valley Community College - Utica, NY
- 14. SUNY Rockland Community College - Suffern, NY
- 15. SUNY Schenectady Community College - Schenectady, NY
- 16. SUNY State University of New York System - Albany, NY
- 17. SUNY Ulster Community College - Stone Ridge, NY
- 18. SUNY University at Albany - Albany, NY
- 19. SUNY University at Buffalo - Buffalo, NY
- 20. University of North Carolina at Pembroke - Pembroke, NC
- 21. University of North Carolina System - Raleigh, NC
- 22. Wake Technical Community College - Raleigh, NC

**2023 Cohort**

- 1. American Health Information Management Association (AHIMA) - Chicago, IL
- 2. Bay Path University - Longmeadow, MA
- 3. Bryan University - Tempe, AZ
- 4. Central Christian College of Kansas - McPherson, KS
- 5. Cleveland State University - Cleveland, OH
- 6. The College of Westchester - White Plains, NY
- 7. Colorado School of Mines - Golden, CO
- 8. Credit for Prior Learning Assessment Network (C-PLAN), Minnesota State Colleges & Universities - St. Paul, MN
- 9. D'Youville University - Buffalo, NY
- 10. Elon University - Elon, NC
- 11. Florida Gulf Coast University - Fort Myers, FL
- 12. Harford Community College - Bel Air, MD
- 13. Houston Community College - Houston, TX
- 14. Huntington Junior College - Huntington, WV
- 15. Kennesaw State University - Kennesaw, GA
- 16. Louisiana State University (LSU) Online & Continuing Education - Baton Rouge, LA
- 17. Miami University Regionals - Middletown, OH
- 18. Minneapolis College - Minneapolis, MN
- 19. Montgomery County Community College - Blue Bell, PA
- 20. National Writing Project - Berkeley, CA
- 21. Purdue University Global - Indianapolis, IN
- 22. SUNY Onondaga Community College - Syracuse, NY
- 23. SUNY Westchester Community College - Valhalla, NY
- 24. Unity College - New Gloucester, ME
- 25. University of Hawaii System - Honolulu, HI
- 26. University of Missouri - St. Louis, MO
- 27. University of Wisconsin - Milwaukee, WI
- 28. Western Colorado Community College - Grand Junction, CO

# Key Research Questions

1. What does it take to implement incremental credentials at institutions and change the national credentialing system?
2. What are the student outcomes from engaging in/completing incremental credentials?
  - Access
  - Enrollment
  - Persistence
  - Completion
  - Next Steps





# Incremental Credentialing Outcomes

- So far, 101 incremental credentials have been identified to study:
  - 66% are launched.
  - 49% are credit-bearing, 37% are noncredit, and 15% are a combination – often including industry credentials or credit for prior learning (CPL).
  - For credit credentials, the most common range is 10-12 credits within the first two years of undergraduate studies.
- The titling of these credentials (e.g., microcredential, badge, certificate, degree) varies. Microcredential are the most commonly used title. (41%)



# Credentialing Areas Across CO, NC, NY

Information  
Technology (21)

Health Care (17)

Business (17)

Education (12)

Hospitality/Culinary  
(8)

Science Lab (5)

Human Services (4)

Communication (4)

Trades (4)

Art (3)

Design Thinking (2)

Advanced  
Manufacturing (2)

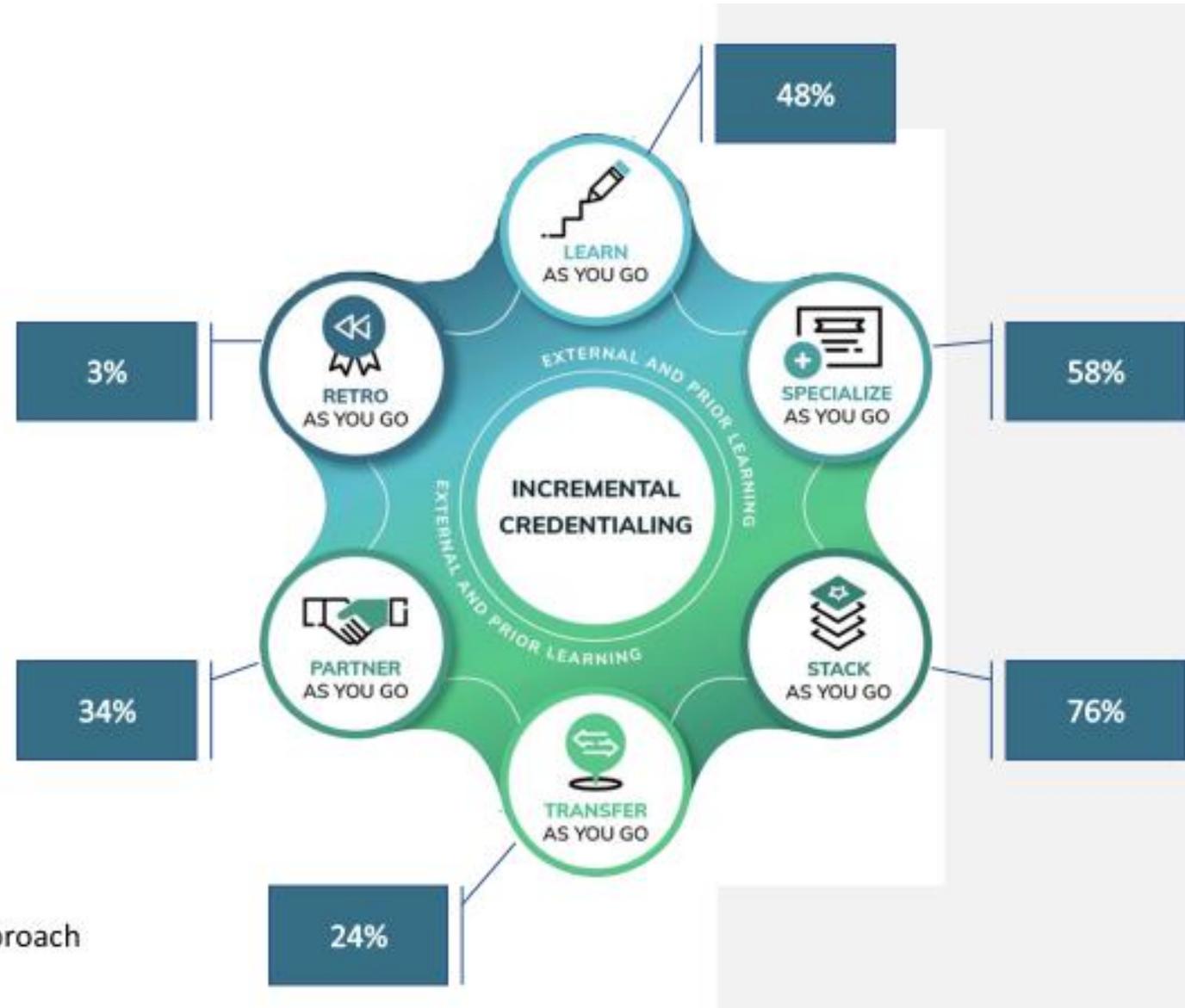
Veterinarian (2)

Criminal Justice (1)

Space Flight (1)



# Credentials used more than one Framework approach



Only 15 credentials had just one approach



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[Info@credentialasyougo.org](mailto:Info@credentialasyougo.org)



<https://credentialasyougo.org/newsletter-sign-up/>



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# Q & A



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# NETWORKING BREAK





# PATHWAYS IN A CHANGING WORLD: SESSION 2

## WORK-BASED LEARNING AND APPRENTICESHIPS

**Dr. Annelies Goger**

Fellow

*The Brookings Institution*

Moderator

**Maria Heidkamp**

Chief, Innovation and Partnerships

*New Jersey Council of County Colleges*





# The role of Educators in Scaling Earn-and-Learn Opportunities

Annelies Goger, Brookings Metro

 [Annelies\\_goger](#)

*New Jersey Pathways to Career Opportunities Summit, 2023*

# Why expand earn-and-learn?



Evidence that work-based learning is effective



Businesses need workers with technical skills and industry experience



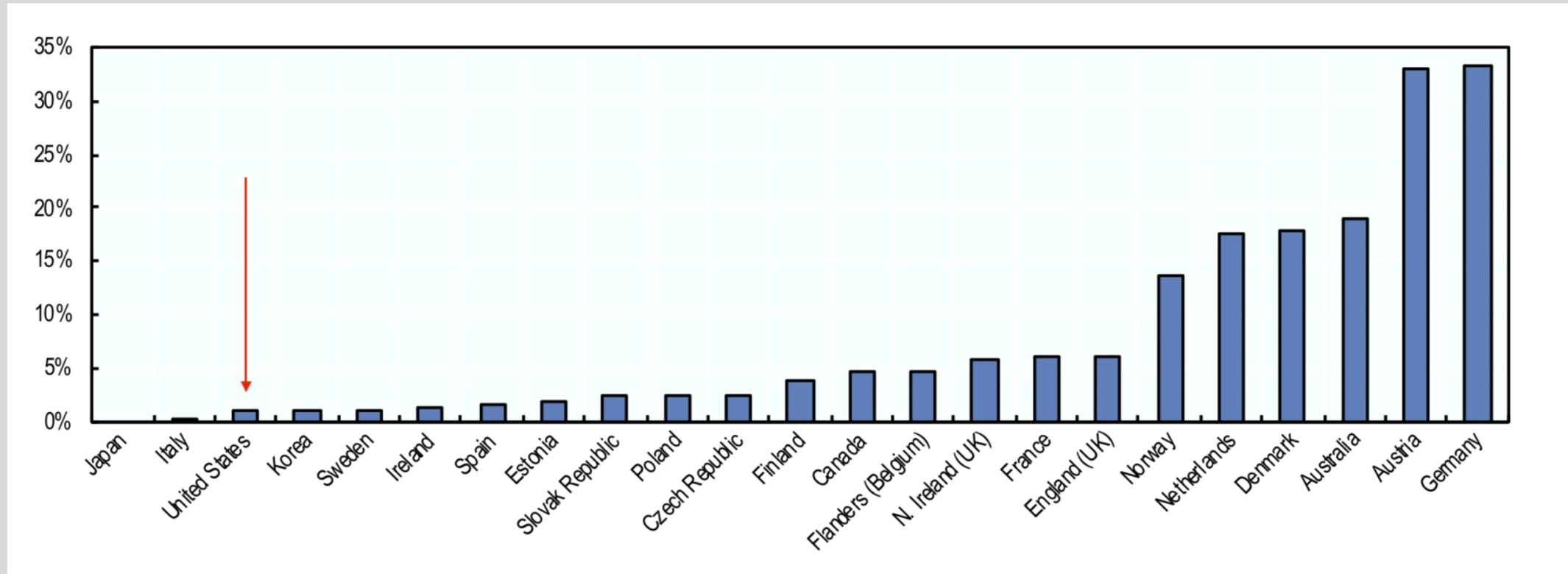
Attractive to learners who are left out



Options multiplier:  
no dead ends

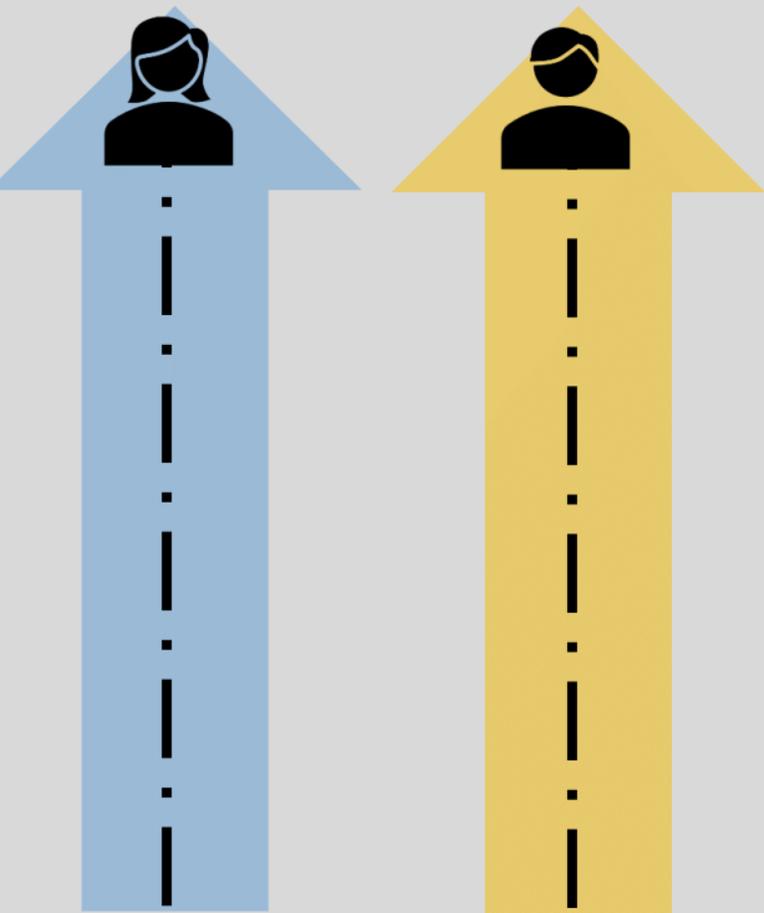
# U.S. apprenticeships are siloed, limited in scale

Current apprentices as a share of all students enrolled in upper-secondary and short postsecondary education

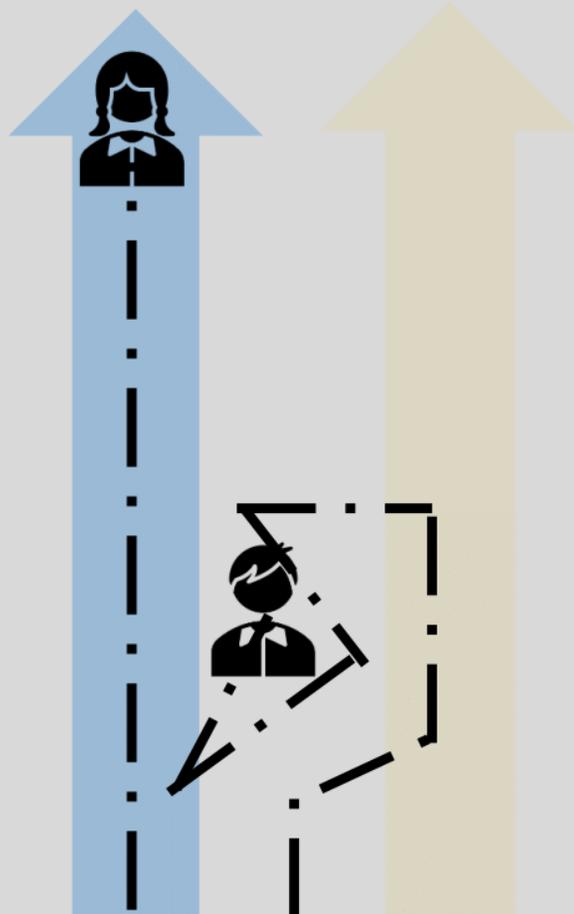


Source: Kuczera, M. (2017), "Striking the right balance: Costs and benefits of apprenticeship", OECD Education Working Papers, No. 153, OECD Publishing, Paris, <http://dx.doi.org/10.1787/995fff01-en>.

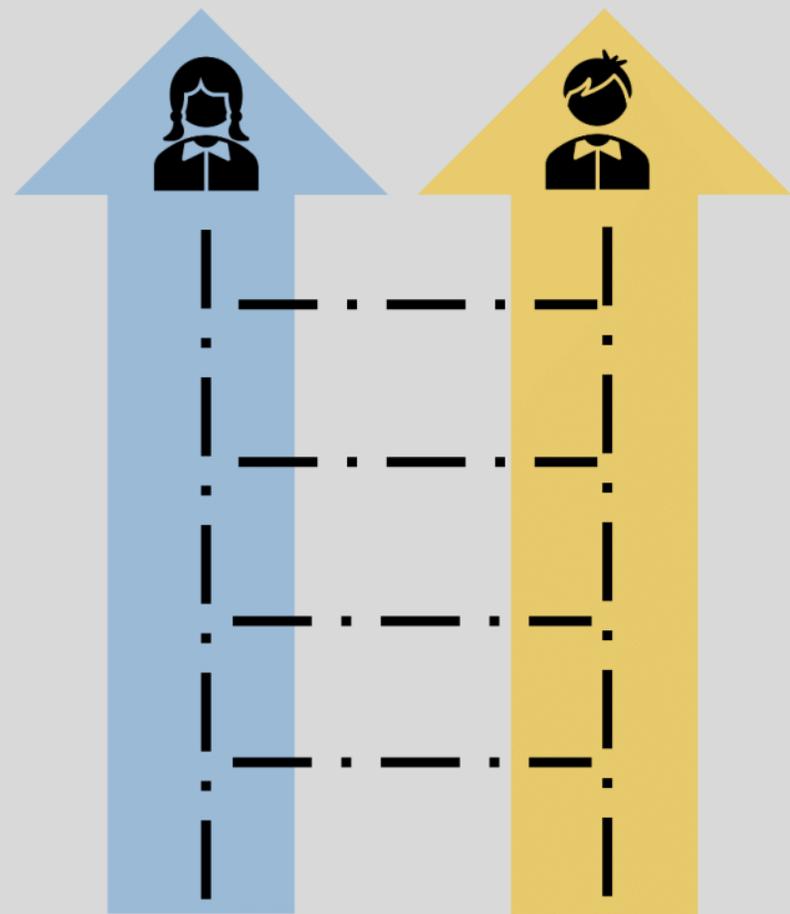
Tracking



Also Tracking!



Permeability



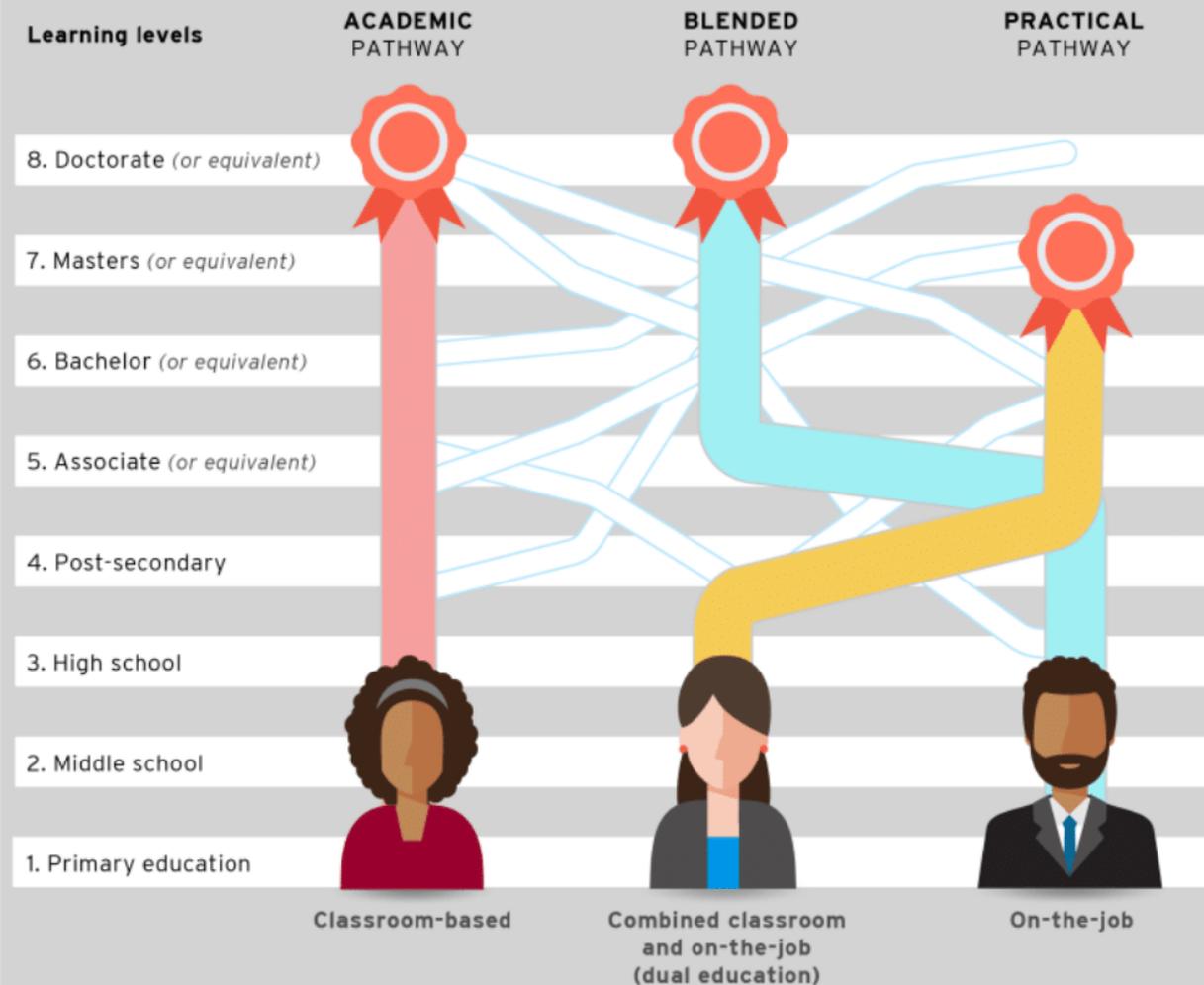
Tracking versus permeability

# Key elements

- Applied, experiential pathways
- Demand-driven, engaged employers
- Learner-centered
- Education-employment linkage

## MULTIPLE PATHWAYS *to* OPPORTUNITY

*The changing nature of work will require a sophisticated vision for making our talent development ecosystem more equitable and functional for employers and workers*



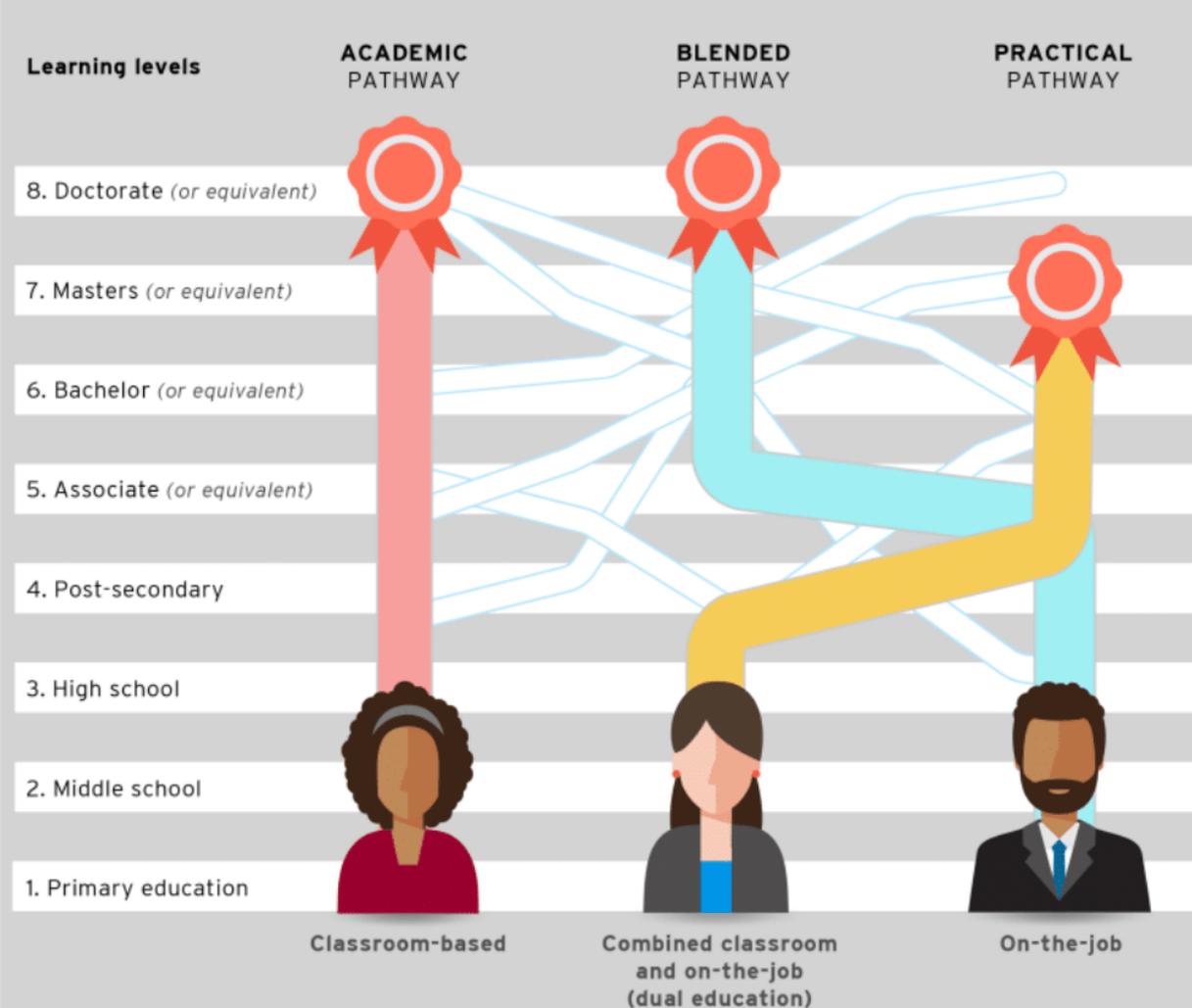
Source: Annelies Goger, inspired by the Swiss vocational education and training (VET) system.

# Key elements (ctd.)

- Research and evaluation
- Permeability – no dead ends
- Quality assurance and trust
- Awareness and shared vision
- Funding, policy, & infrastructure

## MULTIPLE PATHWAYS *to* OPPORTUNITY

*The changing nature of work will require a sophisticated vision for making our talent development ecosystem more equitable and functional for employers and workers*



Source: Annelies Goger, inspired by the Swiss vocational education and training (VET) system.

# Barriers to scaling earn-and-learn pathways

- Outdated, bespoke setup & processes
- Narrow focus on the trades
- Limited funding
- Lack of employer engagement

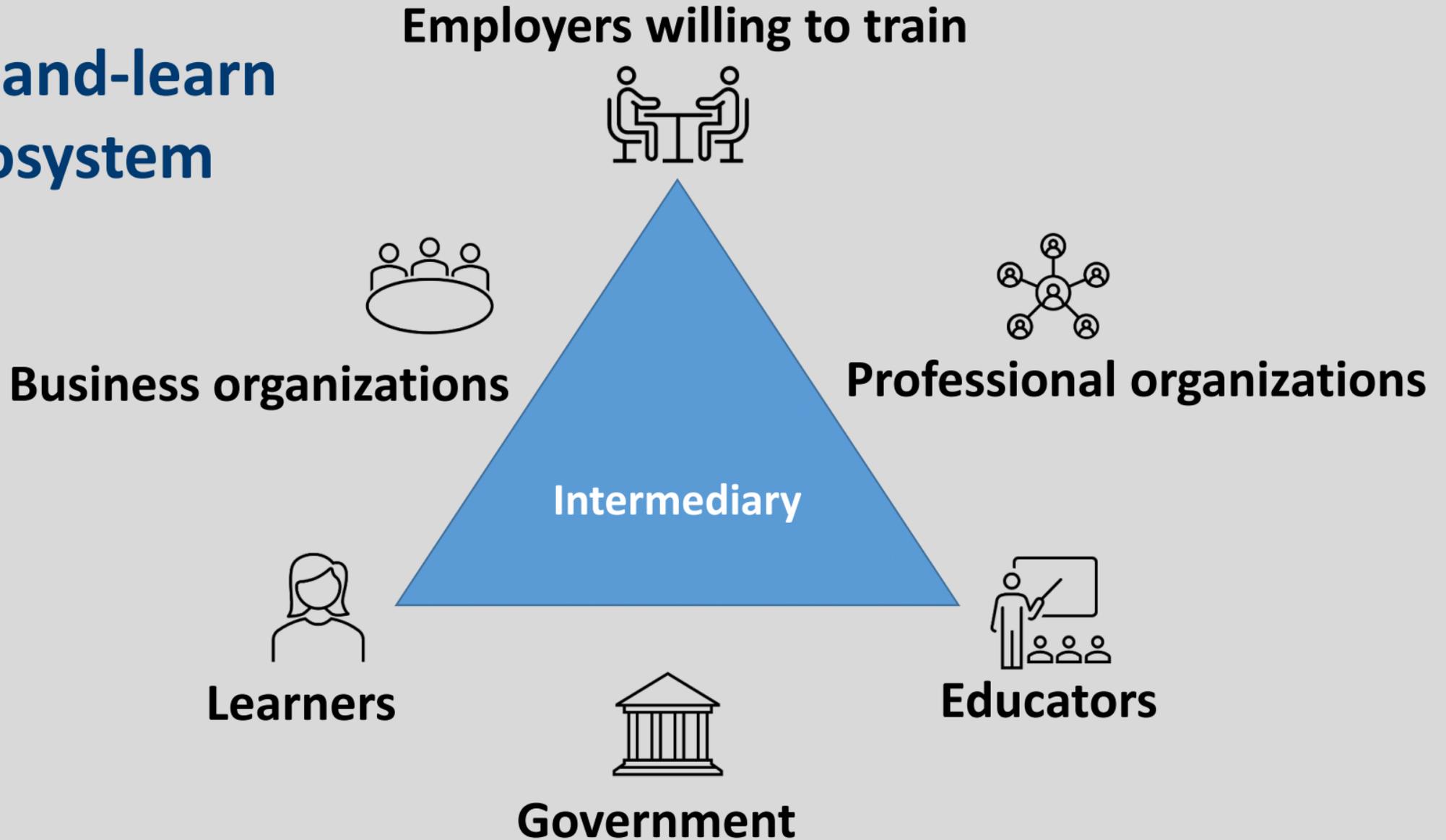


# Barriers to scaling earn-and-learn pathways (ctd.)

- Low awareness & stigma
- Learning not recognized in education system
- Limited data & research
- Fragmentation, 10,000 pilots ecosystem



# Earn-and-learn ecosystem



# Sequential vs. applied learning

Figure 2. Switching from a one-and-done model of education to blended work and learning



Source: Author.

BROOKINGS

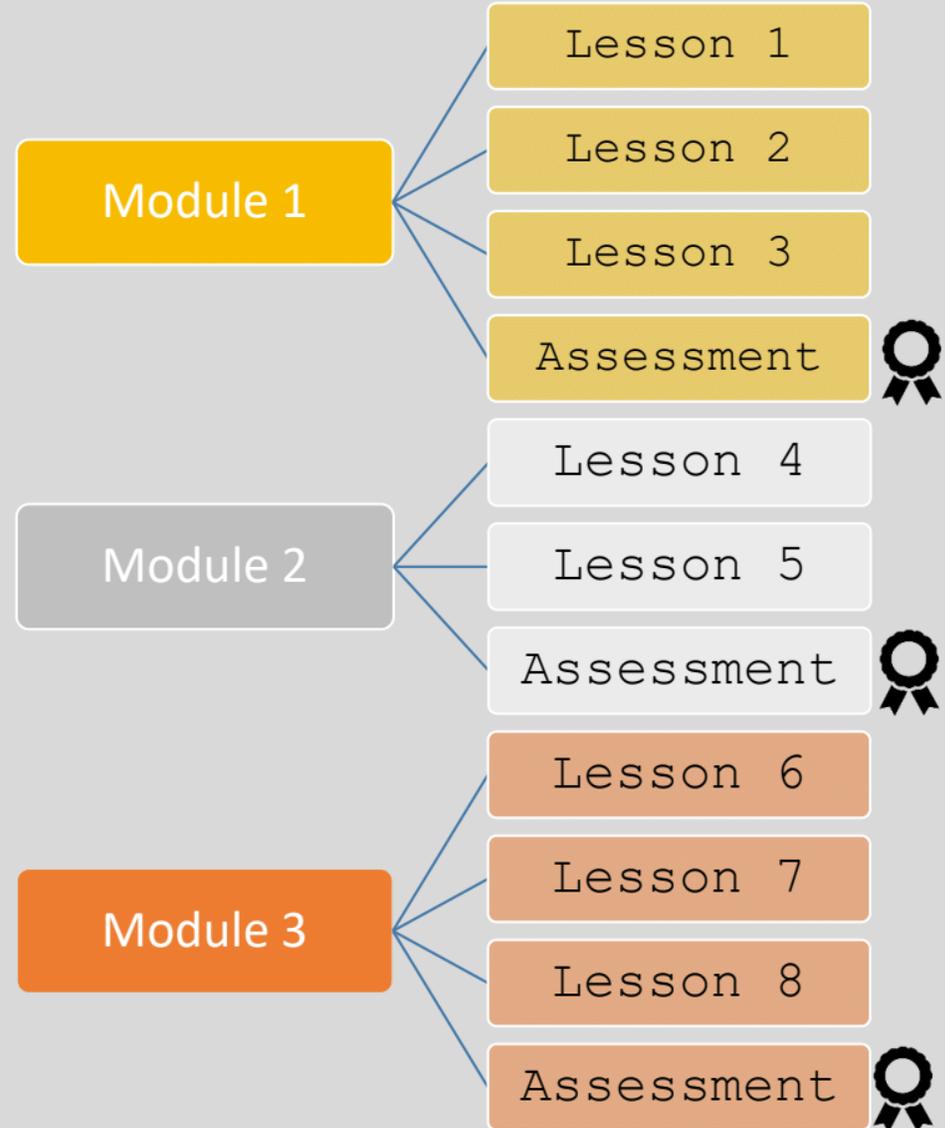
BROOKINGS

## Academic semester course

### Course A

- Lesson 1
- Lesson 2
- Lesson 3
- Lesson 4
- Lesson 5
- Assessment
- Lesson 6
- Lesson 7
- Lesson 8
- Assessment

## Modularized course



# Project overview

**3 states:** Alabama, Indiana, Colorado

**2 years:** Fall 2021 – Fall 2023

**Goal:** Build a community of practice of leading states to guide practitioners, policymakers, and stakeholders towards a shared vision for building systems to scale earn-and-learn opportunities

## Activities

- Community of practice
- Convenings
- Policy briefings
- Papers, blog posts, forthcoming report

# Degree apprenticeships

- Completion of an apprenticeship culminates in a degree / college credit
- Does not end at one degree – progressions and permeability
- Complement to skills-based hiring
- Long-term: an applied degree system?



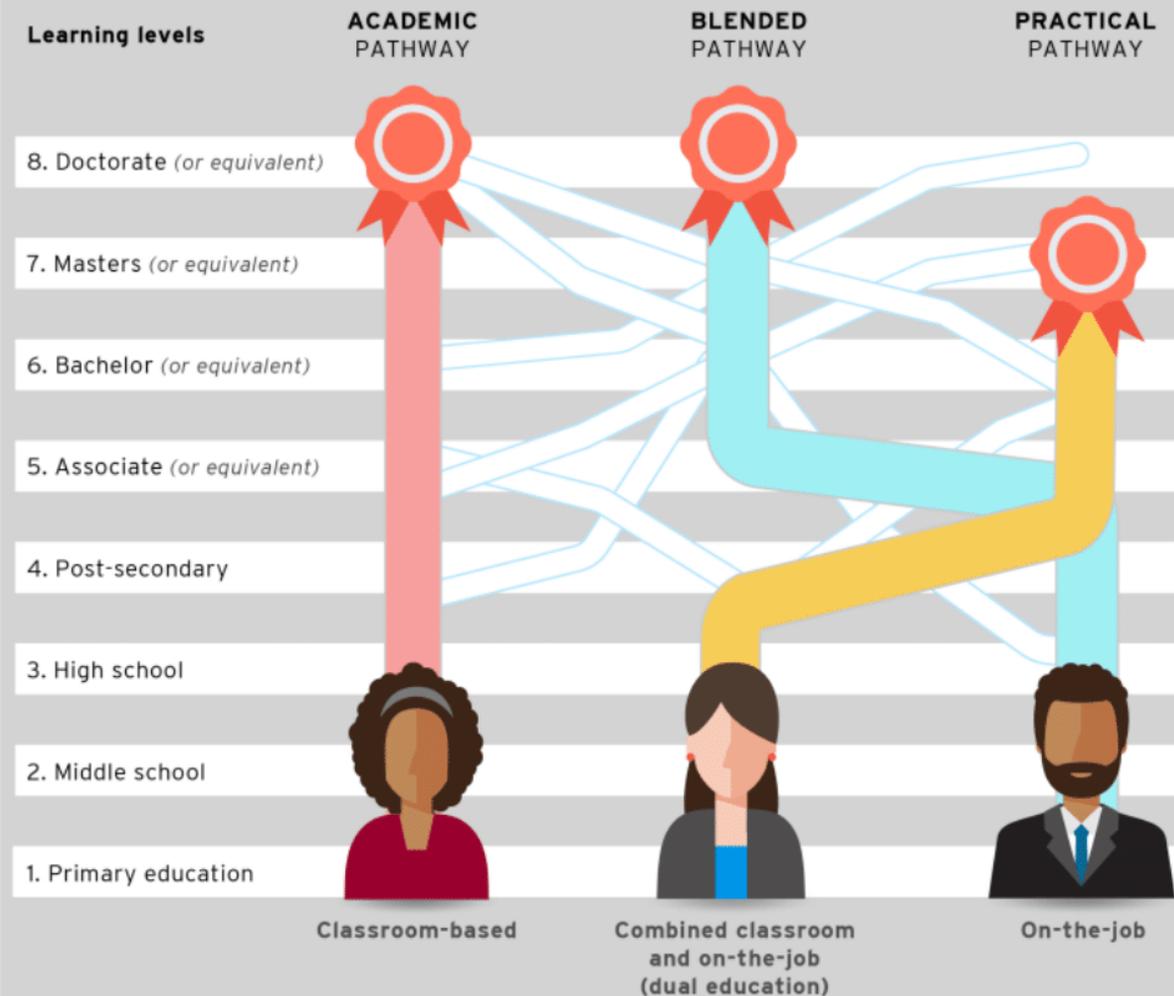
Alabama leaders discuss degree apprenticeship in child care.

# Key elements

- Applied, experiential pathways
- Demand-driven, engaged employers
- Learner-centered
- Education-employment linkage
- Research and evaluation
- Permeability - no dead ends
- Quality assurance and trust
- Awareness and shared vision
- Funding, policy, & infrastructure

## MULTIPLE PATHWAYS to OPPORTUNITY

*The changing nature of work will require a sophisticated vision for making our talent development ecosystem more equitable and functional for employers and workers*



Source: Annelies Goger, inspired by the Swiss vocational education and training (VET) system.

# How could NJ be innovative?

**Recognizing learning:** Prior Learning, competency-based learning, qualifications framework

**State policy:** Formula funding for intermediaries, related instruction, career exploration and counseling, outreach

**Focus on student journey:** K-12, CTE, community college, university

**Reduce legal barriers:** completers can sit for licensing exam, earn degree without retaking coursework

# How could NJ be innovative?

**Connect pathways to data systems:** skills data; outcomes at each learning level, not for a single short-term program

**Prioritize inclusion:** reach people younger, career exploration and navigation, learner voice, transportation, peers & mentors

**Streamline employer engagement:** Connect to sector strategies, reduce duplication in employer engagement, partner with employers to approve applied curricula

**Build capacity:** develop a shared vision and roadmap with key stakeholders, learn from promising practices, go after federal funding

# Further reading

[Whose learning counts? State actions to value skills from outside the classroom](#)

[Apprenticeships for office jobs can prepare downtowns for the future of work](#)

[Desegregating work and learning through earn-and-learn models](#)

[Apprenticeships are an overlooked solution for creating more access to quality jobs](#)

[An apprenticeship FAQ: what employers need to know about talent development](#)

[State-level policies to incentivize workplace learning](#)

## **Forthcoming:**

- Improving employer engagement
- Messaging and outreach

# Q & A



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# BREAK

**RECEPTION  
& DINNER**

**5 PM**

**VIP  
LOUNGE**