

# **Expanding Access to Public Health Educational Opportunities**

2024 ASPPH Annual Meeting for Academic Public Health

## **Outcomes of Facilitated Asynchronous Online Learning Program Aiming to Build Public Health Strategic Skills**

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**Cornell University**

# Recognition

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## **Cornell C<sub>f</sub>HI Team**

- **Donna Leong**
- Cheyanna Frost
- Jeanne Lawless

## **Cornell PEH Team**

- Alex Travis
- Amelia Greiner-Safi
- Lorraine Francis
- Isaac Weisfuse
- Lara Parrilla
- Gary Whittaker

## **eCornell Team**

- Rebecca Rozek
- Kathryn Coldren
- Facilitation Team
- Ops Team
- Instr. Desing Team

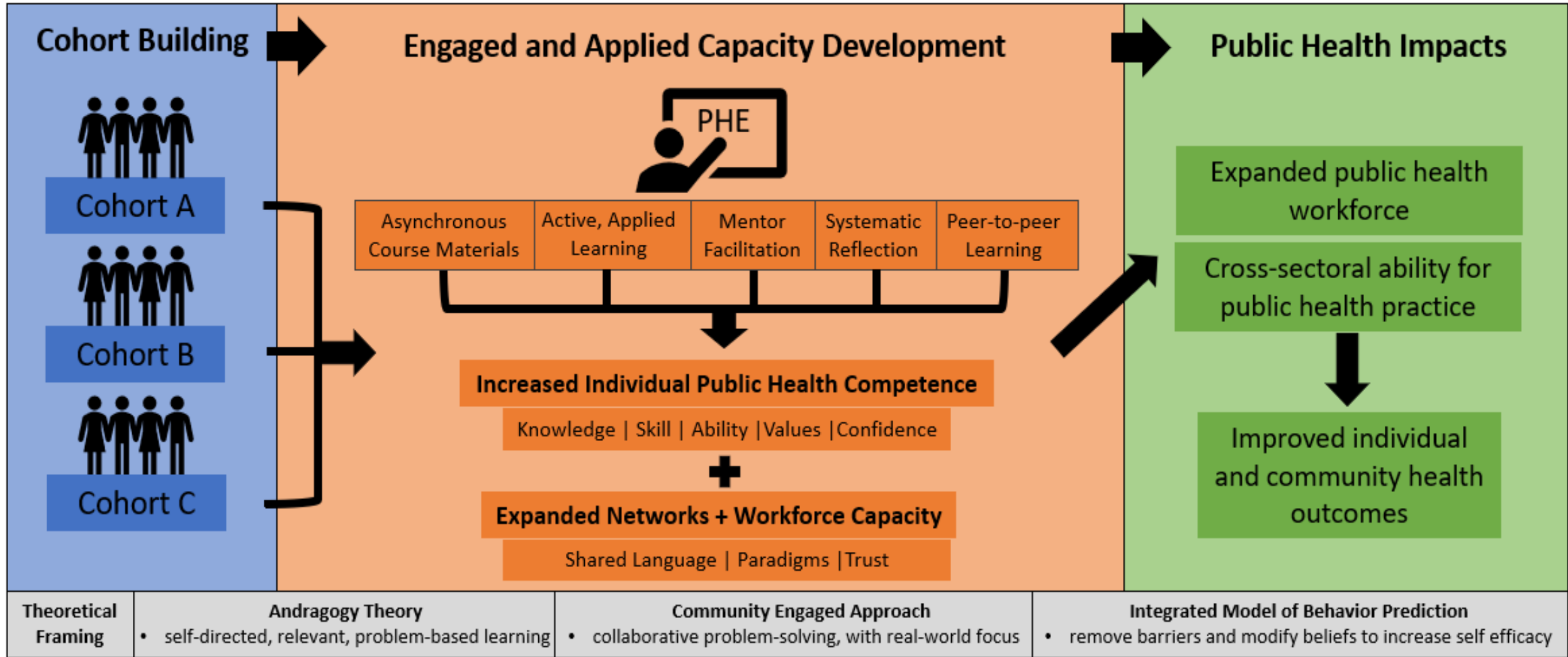
## **Collaborators**

- NYSPHC
- CCE
- NYS OCFS
- USDA/NIFA
- NBPHE
- National 4H Council

## **Cornell Collabs**

- Adi Grabiner Keinan
- Susana Morales
- Laura Santacrose
- Jeff Niederdeppe
- Oliver Gao
- Natalie Mahowald
- Cindy Leifer

# Theory of Change



# Theory Into Action: Competency Driven

Supplemental File 1 - Public Health Essentials Course Outline and Learning Outcomes

Course	Module	Learning Outcomes
1: COVID-19 Readiness Training	Public health initiatives	<ul style="list-style-type: none"> <li>Describe the roles and responsibilities of government public health offices<sup>1,3,4,5</sup></li> <li>Review local CBOs and summarize the public health services they provide<sup>1,3,5</sup></li> <li>Develop a personal vision of how to become a key part of the vast field of public health<sup>4,5</sup></li> </ul>
	COVID-19	<ul style="list-style-type: none"> <li>Expand understanding of COVID-19 as an emergent disease<sup>3</sup></li> <li>Examine COVID-19 disease dynamics to better support prevention efforts<sup>3,4</sup></li> <li>Describe how you can become involved in COVID-19 prevention efforts<sup>1,2,5</sup></li> </ul>
	Promoting vaccination	<ul style="list-style-type: none"> <li>Investigate community vaccination efforts and lessons learned from other campaigns<sup>3,4</sup></li> <li>Build understanding of COVID-19 vaccine development<sup>3,5</sup></li> <li>Identify ways to play a role in boosting community immunity<sup>1,2,3,5</sup></li> </ul>
	Broadening influence	<ul style="list-style-type: none"> <li>Explore the science of human behavior and why change is challenging<sup>1,4</sup></li> <li>Discover strategies to influence others, combat misinformation, and encourage health<sup>1,2,3,4,5</sup></li> <li>Identify ways to help people consider a new behavior — like COVID-19 vaccination<sup>1,2,3,4,5</sup></li> </ul>
2: Public Health Foundations	Health issues & the role of public health	<ul style="list-style-type: none"> <li>Explain the role of public health leaders<sup>1,3,4,5</sup></li> <li>Describe focal public health issues, including leading causes of morbidity and mortality<sup>2,3,4</sup></li> <li>Help others understand, and appreciate how to prevent priority public health areas<sup>1,2,3,5</sup></li> </ul>
	Models for considering the public's health	<ul style="list-style-type: none"> <li>Explain the significance of social determinants and equity as drivers of public health<sup>1,2,4</sup></li> <li>Apply various models to help envision ways to address and improve public health<sup>2,3,4,5</sup></li> <li>Use a SWOT analysis to propose a strengths-based public health intervention<sup>1,3,4,5</sup></li> </ul>
	Public health values	<ul style="list-style-type: none"> <li>Explain why prevention, and the determinants of health are important in public health<sup>4,5</sup></li> <li>Provide examples of primary, secondary, and tertiary prevention interventions<sup>4</sup></li> <li>Research local organizations to partner with on public health and health equity projects<sup>1,2,4,5</sup></li> </ul>
3: Assessing Community Health	Interpreting public health data	<ul style="list-style-type: none"> <li>Review public health data to identify leading causes of death and disability in a region<sup>1,2,3,4,5</sup></li> <li>Compare, contrast, and interpret data<sup>1,3,4,5</sup></li> <li>Develop a fact-based argument around why to address a public health need<sup>1,2,5</sup></li> </ul>
	Analyzing local public health data	<ul style="list-style-type: none"> <li>Compile public health data; develop a state and county public health data profile<sup>1,3,4,5</sup></li> <li>Interpret data to describe disparities and justify a public health intervention<sup>1,2,3,4,5</sup></li> <li>Propose a public health intervention that might address local public health needs<sup>1,2,4,5</sup></li> </ul>
	Connecting public health resources	<ul style="list-style-type: none"> <li>Develop a resource directory of federal and state agencies linked to public health<sup>1,2,4</sup></li> <li>Identify local resources who can be allies in a public health response<sup>1,2,3,5</sup></li> <li>Summarize community demographics, public health gaps, and opportunities for change<sup>1,3,4,5</sup></li> </ul>

4: Supporting Public Health	Behavior change strategies	<ul style="list-style-type: none"> <li>Describe how factors from multiple layers influence what humans do<sup>2,4,5</sup></li> <li>Discuss racism, and the impacts it has on health and health outcomes<sup>1,4,5</sup></li> <li>Apply behavior change theory to identify factors that may help or hinder action<sup>1,2,3,4,5</sup></li> </ul>
	Effective public health communication	<ul style="list-style-type: none"> <li>Complete an audience analysis to inform an effective public health campaign<sup>1,2,3</sup></li> <li>Define public health communication goals to inform an effective public health campaign<sup>1,3,4,5</sup></li> <li>Develop a public health communication plan to meet goal and match target audience<sup>1,2,3,5</sup></li> </ul>
	Building trust and community relations	<ul style="list-style-type: none"> <li>Describe how you are working to build cultural awareness and competence<sup>1,2,3,4,5</sup></li> <li>Explain social identities and influence on trust building and cultural competence<sup>1,2,3,4,5</sup></li> <li>Apply LARA method to shift from debate to discussion and dialogue<sup>2,3,5</sup></li> </ul>
5: Public Health Preparedness	Air pollution + health	<ul style="list-style-type: none"> <li>Describe what air pollution is, and how it affects people's health<sup>2,4</sup></li> <li>Predict who, in local communities, bears health effects disproportionately<sup>1,3,4,5</sup></li> <li>Develop a statement of need and an action plan to learn more about air pollution<sup>2,3</sup></li> </ul>
	Climate change + health	<ul style="list-style-type: none"> <li>Describe what climate change is, and how it affects people's health<sup>2,4</sup></li> <li>Predict who, in local communities, bears health effects disproportionately<sup>1,3,4,5</sup></li> <li>Develop a statement of need and an action plan to learn more about climate change<sup>2,3</sup></li> </ul>
	Biodiversity + health	<ul style="list-style-type: none"> <li>Describe what biodiversity is, and how it affects people's health<sup>2,4</sup></li> <li>Predict who, in communities, bears health effects of biodiversity loss disproportionately<sup>1,3,4,5</sup></li> <li>Develop a statement of need and an action plan to learn more about biodiversity<sup>2,3</sup></li> </ul>
	COVID-19 + health	<ul style="list-style-type: none"> <li>Differentiate viruses from bacteria, and describe zoonotic transmission<sup>2,3,4</sup></li> <li>Discuss how human interactions with nature have led to emergent diseases<sup>1,3,4</sup></li> <li>Describe how environmental factors increased the severity of COVID-19 in communities<sup>2,3,4,5</sup></li> </ul>
	Emergency preparedness	<ul style="list-style-type: none"> <li>Describe what extreme weather events are and why they're becoming more dangerous<sup>2,4</sup></li> <li>Describe the impacts of extreme weather events on health, property, and economies<sup>2,4,5</sup></li> <li>Research ways to become more skilled in emergency preparedness and response<sup>1,3</sup></li> </ul>
Learning Outcome Derived from: <ol style="list-style-type: none"> <li>Core Competencies for Public Health Professionals<sup>12</sup></li> <li>Core Competencies for Community Health Workers<sup>23</sup></li> <li>Certified in Public Health Domain Areas<sup>24</sup></li> <li>Council on Education for Public Health<sup>25</sup></li> <li>Public Health Strategic Skills<sup>13</sup></li> </ol>		

# Theory Into Action: Strategic Skill Focused

		Public Health Essentials Content					Degree of Strategic Skill Focus
		Course 1: COVID-19 Readiness Training	Course 2: Public Health Foundations	Course 3: Assessing Community Health	Course 4: Supporting Public Health	Course 5: Public Health Preparedness	
		<i>4 modules + 40 learning units</i>	<i>3 modules + 55 learning units</i>	<i>3 modules + 51 learning units</i>	<i>3 modules + 61 learning units</i>	<i>5 modules + 59 learning units</i>	
Strategic Skills of Focus	Effective Communication	x	XX	XX	XX	XX	- 31 pages - 5 assignments
	Data-Based Decision Making		XX	XX	x	x	- 24 pages - 3 assignments
	Justice, Equity, Diversity, Inclusion	x	XX	XX	XX	x	- 29 pages - 5 assignments
	Resource Management	x		x	x		- 9 pages - 2 assignments
	Change Management	x			x	XX	- 12 pages - 3 assignments
	Systems and Strategic Thinking		XX	XX	XX	XX	- 16 pages - 3 assignments
	Community Engagement	x		x	XX	XX	- 18 pages - 3 assignments
	Cross-Sectoral Partnerships	x	x	XX	XX	x	- 7 pages - 3 assignments
	Policy Engagement		XX	x		x	- 8 pages - 2 assignments
	Specialized Skills	XX	x	x	x	XX	- 19 pages - 3 assignments

# Theory Into Action: Pedagogically Strong

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- **Goal-driven:** specific learning outcomes → skills card → certificate
  - Teaches/reinforces strategic skills across varying contexts and cross-cutting topic areas
- **Self-directed**, adds to learner experiences, is relevant, and is focused on problem-solving (Andragogy)
- **Attached to real-world** opportunities with collaborative problem-solving (CELT)
- Process helps learning move toward **action** (IMBP)

## Methods:

- Teaching: short videos, readings, self-directed research
- Applied activities, tool use, systematic reflection
- Peer-engagement, accountability checks
- Mentoring + feedback
- Motivational pushes





# PUBLIC HEALTH ESSENTIALS

Cornell Certificate Program

## OVERVIEW AND COURSES

- + Public Health Foundations
- + Assessing and Implementing Public Health
- + Using Public Health Data for Action
- + Supporting Public Health Behaviors
- + Public Health Preparedness

## HOW IT WORKS



### COURSE LENGTH

3 weeks



### PROGRAM DURATION

4 months



### CLASS SIZE

Under 35 students



### EFFORT

4-5 hours per week



### FORMAT

100% online



### MODEL

Instructor-led

## KEY COURSE TAKEAWAYS

- ✓ Build your understanding of the various factors that impact health as well as the role you can play in improving health outcomes
- ✓ Apply public health assessment models, data analysis methods, and communications best practices to a variety of circumstances
- ✓ Identify factors contributing to public health disparities in your community
- ✓ Determine public health and intervention opportunities to improve overall health
- ✓ Assess how to influence behavioral changes to support public health and intervention opportunities
- ✓ Develop practical strategies for increasing your influence to improve public health behaviors
- ✓ Plan for interventions at a community level, including impact assessment as well as vaccination acceptance and uptake



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### Course Description



Public health professionals work to prevent or reduce disability and disease in communities. Throughout history, public health interventions have allowed societies to improve length and quality of life. This mini-course offers you the opportunity to build your knowledge, skills, and confidence as you take a more active role in community health efforts as a member of the public health workforce.

There are three modules in this course. Each module is designed to take approximately five hours to complete, including spending one to two hours on applied assignment work that you will submit for feedback. In total, you should expect to spend 15 hours on this course, and you will submit three assignments for feedback from your facilitator.

### This course includes:

- Two discussions
- Four tools to download and use on the job
- Three activities
- Three scored assignments
- One [Course 1 transcript](#)

### What you'll do

- Consider the major public health issues of today
- Explore the multiple factors that influence individual and community health
- Describe the role of public health in assuring human health and well-being
- Explore public health needs, opportunities, and partnerships in your community
- Propose and defend an approach to advance health equity in your community



# Utilization: Sept 2021-March 2024

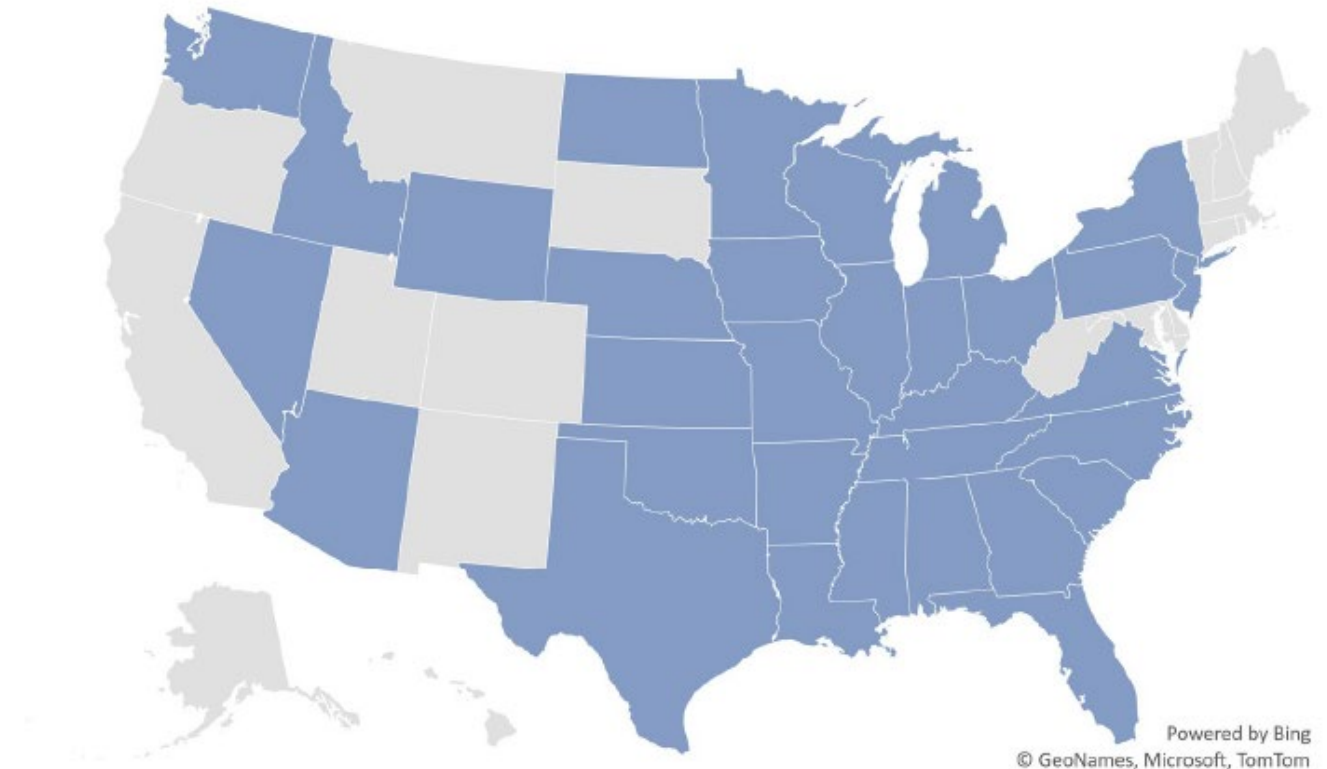
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- **1,115 Enrollees**

- 92 counties
- 32 states (majority NYS)

- **Demographic Diversity:**

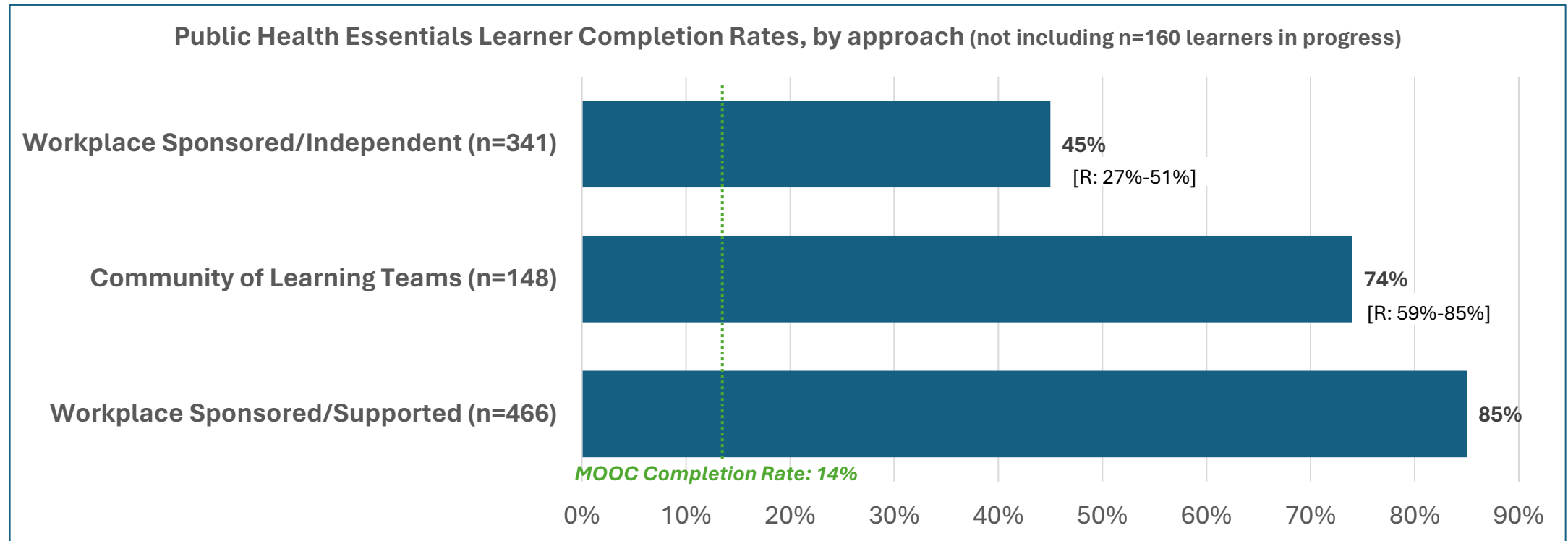
- 57% from rural counties
- 41% BIPOC participants
- 59% with a bachelor's education or lower
- 62% with 0-2 years of public health experience



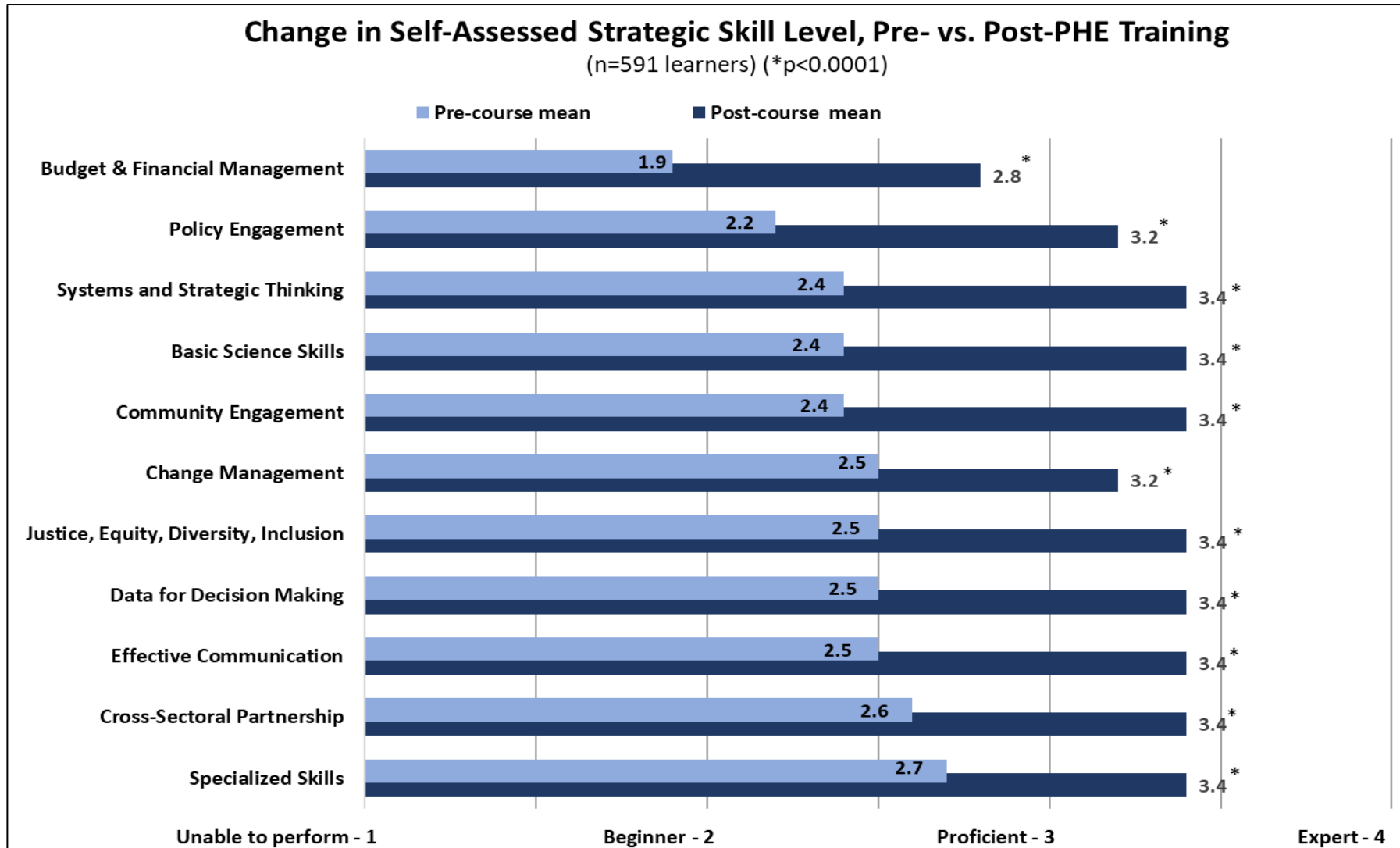
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# Completion Rates

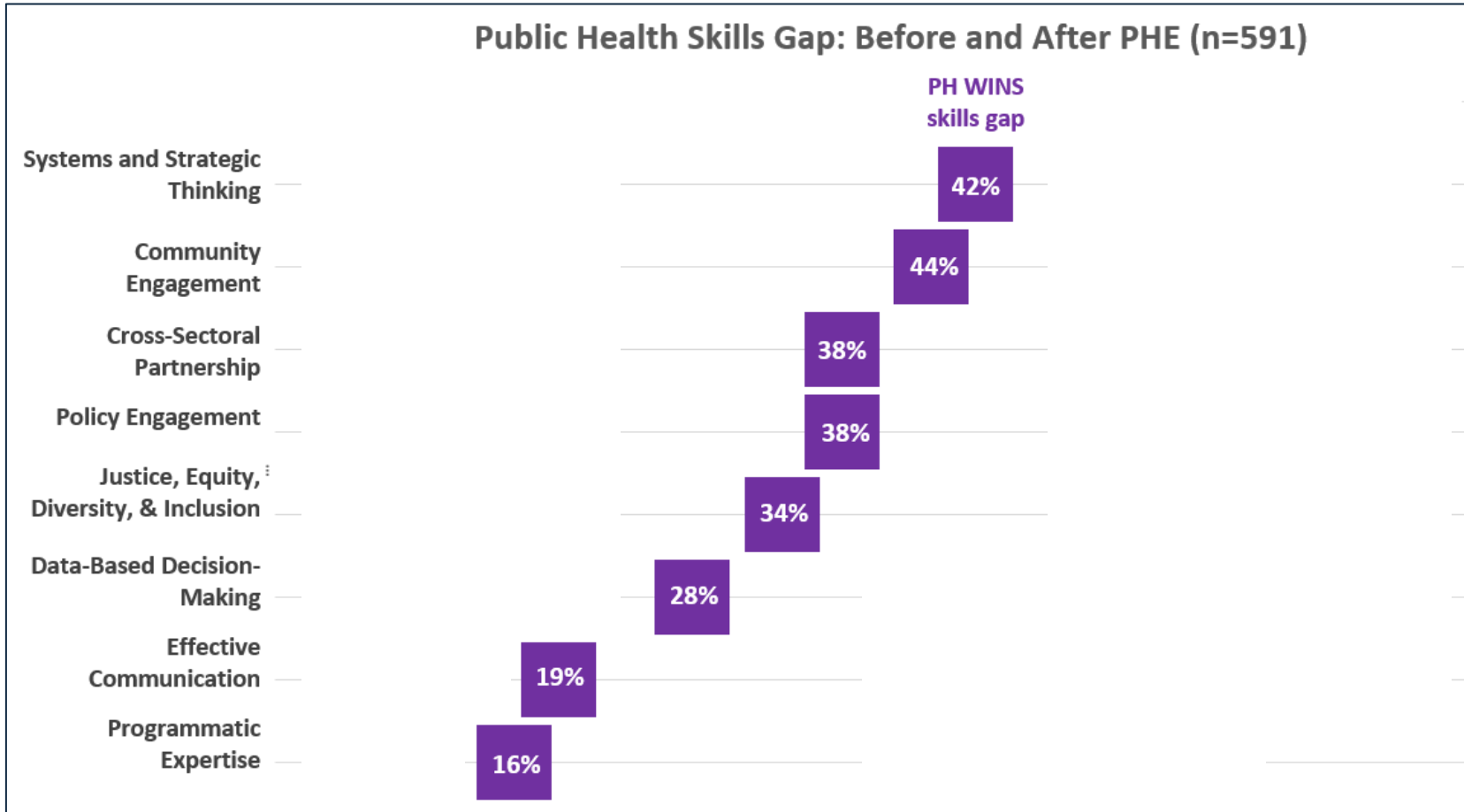
- 69% completion rate overall
  - Differ only by “approach”



# Short-term Outcomes – Competence Gains



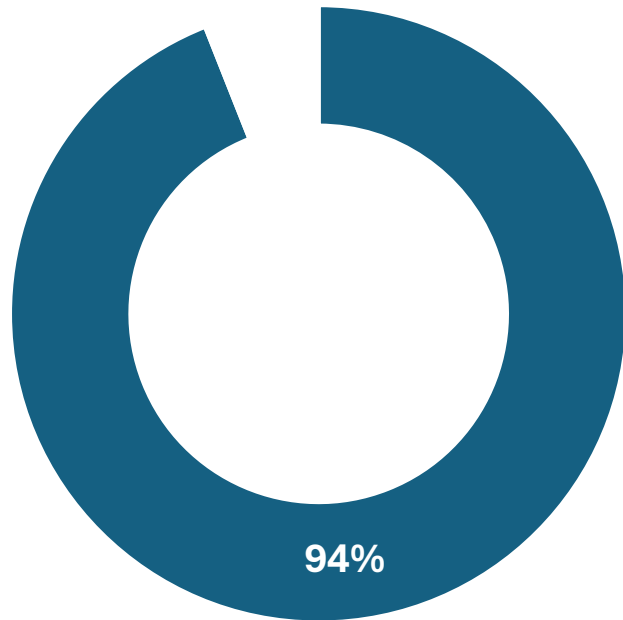
# Short-term Outcomes - Closed Skills Gaps



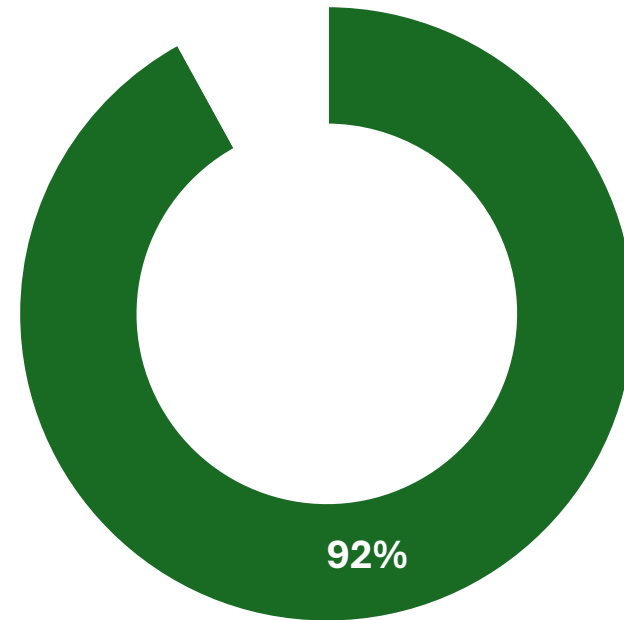
# Intermediate Outcomes – Application to Work

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Applying Knowledge + Skills to Work



Knowledge + Skills Benefit Organization





# Intermediate Outcomes – Application to Work

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- **Better able to speak the language of public health:** key concepts, fundamental components, acronyms
  - Understand concepts being discussed; contribute to conversations
  - Effectively communicate with the public
  - **Supervisors:** noted better grasp of public health terminology than other employees who had been at the organization for longer
- **Broader appreciation of public health work:** how vast the field is; how their work fits in
  - Shift from topic-specific views to functional approach
  - Appreciate how different issues are interconnected
  - See how skillsets as transferrable to other public health roles
- **Understand how public health frameworks shape work:** e.g., SDoH, Socio-Ecological model
  - Prior: Unfamiliar with frameworks; unable to articulate what was driving project work
  - **Supervisors:** noted shift in thinking and action by PHE participants as they engaged in applied learning
- **Application of Skills for Action**
  - **Data for Decision-making:** Supervisors note PHE graduates teach other colleagues how to find, scrutinize, and use data
  - **Community Engagement:** collaboration to build the trust, community-centered design + public health messaging

# Longer-term Outcomes – Health Impacts

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**How is capacity growth is being translated into actions in support of community health and wellbeing?**

- **Projects that improve community health outcomes**
  - **Refining and improving existing programs** (e.g. capacitating community health workers, addressing health equity gaps, augmenting JEDI focus, closing ‘last mile’, shared leadership)
  - **Spearheading new projects** (e.g., weather emergency preparedness, health communications, food access/security, youth empowerment, collective impact, CMD prevention)
  - **Supervisors:** new ideas → expand approaches; grant applications
- **Augmenting public health workforce capacity**
  - Plan to stay within the field of public health
  - Actively pursuing new opportunities to continue to develop skills in public health
  - Applying for new positions

# Looking Forward:

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- Continue to Engage
- Continue to Learn
- Continue to Adapt
- Continue to Assess
- Continue to Evaluate *Outcomes → Impacts*
- Continue to Share

Strengthened Public Health Systems

Health Equity at Scale