the new landscape of digital literacy

What Policymakers and Workforce Advocates Need to Know

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Molly Bashay & Amanda Bergson-Shilcock
May 5, 2020

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Webinar Scope

The Covid-19 pandemic has spotlighted the importance of digital literacy for America's workers and the education, training and workforce programs that serve them. Millions of workers are hurrying to adjust to new remote-work tools, while education and training participants are quickly upskilling to adapt to online learning. Meanwhile, workforce and adult education program staff are working to transform in-person services to virtual formats, all while ensuring that their own digital skills are up-to-speed.

Current Snapshot

Major Changes in the Education and Workforce Landscape

- The novel coronavirus pandemic and resulting economic fallout has devastated families, communities and businesses, leaving many individuals struggling to adapt
- As workers and business attempt to keep pace, **digital learning and remote working tools** have become all but essential.

Current Snapshot

Strained Access and Rapid Transformation

- Public libraries and other traditional access points are closed, meaning millions are disconnected from Wi-Fi and skill-building opportunities
- Education programs at all levels are racing to convert to engaging, fully-online learning experiences while instructors upskill themselves

Current Snapshot

Compounding Inequities and Disproportionate Impact

- Not everyone has the capacity to weather this disruption successfully by adopting digital stopgaps and patches
- Variations in access to reliable broadband, digital devices, and the skills or skills training necessary to use these tools mean the transition to an online society is falling hardest on the already vulnerable

Overview of Today's Webinar

In this webinar, you will:

1. Get a sneak peek at a new data analysis illustrating **digital skill gaps among workers in major industries** such as healthcare and manufacturing
2. Learn key questions to ask in **applying a racial equity lens to digital literacy** efforts
3. And hear about National Skills Coalition's new recommendations for policymakers and advocates seeking to **incorporate digital skill-building in their COVID-19 response plans**.

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what the data say

Illustrating Digital Skill Gaps Among Workers in Major Industries

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Current Snapshot

Your Responses from the Pre-webinar Survey

How is Covid-19-related disruption affecting the people you serve? Who has been impacted the most?

How can data help us at this moment?

Data can help us:

- Understand the digital literacy landscape in a pre-COVID19 world
- See how the pandemic is accelerating pre-existing trends
- Anticipate emerging workforce skill demands
- Make the case for new & adjusted policies to support digital skill-building

What did digital skill gaps look like pre-COVID?

- Data you're about to see comes from rigorous assessment called PIAAC *(background handout available)*
- Organized by OECD and conducted in US by NCES of the US Department of Education
- US workers ages 16-64
- Employed (at the time of survey)

A word of thanks…

- **Our research partners at the American Institutes for Research**
  - **Learn more about their work at AIR.org, and access more about the OECD Survey of Adult Skills (PIAAC) dataset at PIAACgateway.com**
- **Walmart for financial support**

We thank Walmart for their support but acknowledge that the findings, conclusions, and recommendations presented here are those of National Skills Coalition, and do not necessarily reflect the opinions of Walmart.

Nearly 1 in 3 US workers have digital skill gaps.

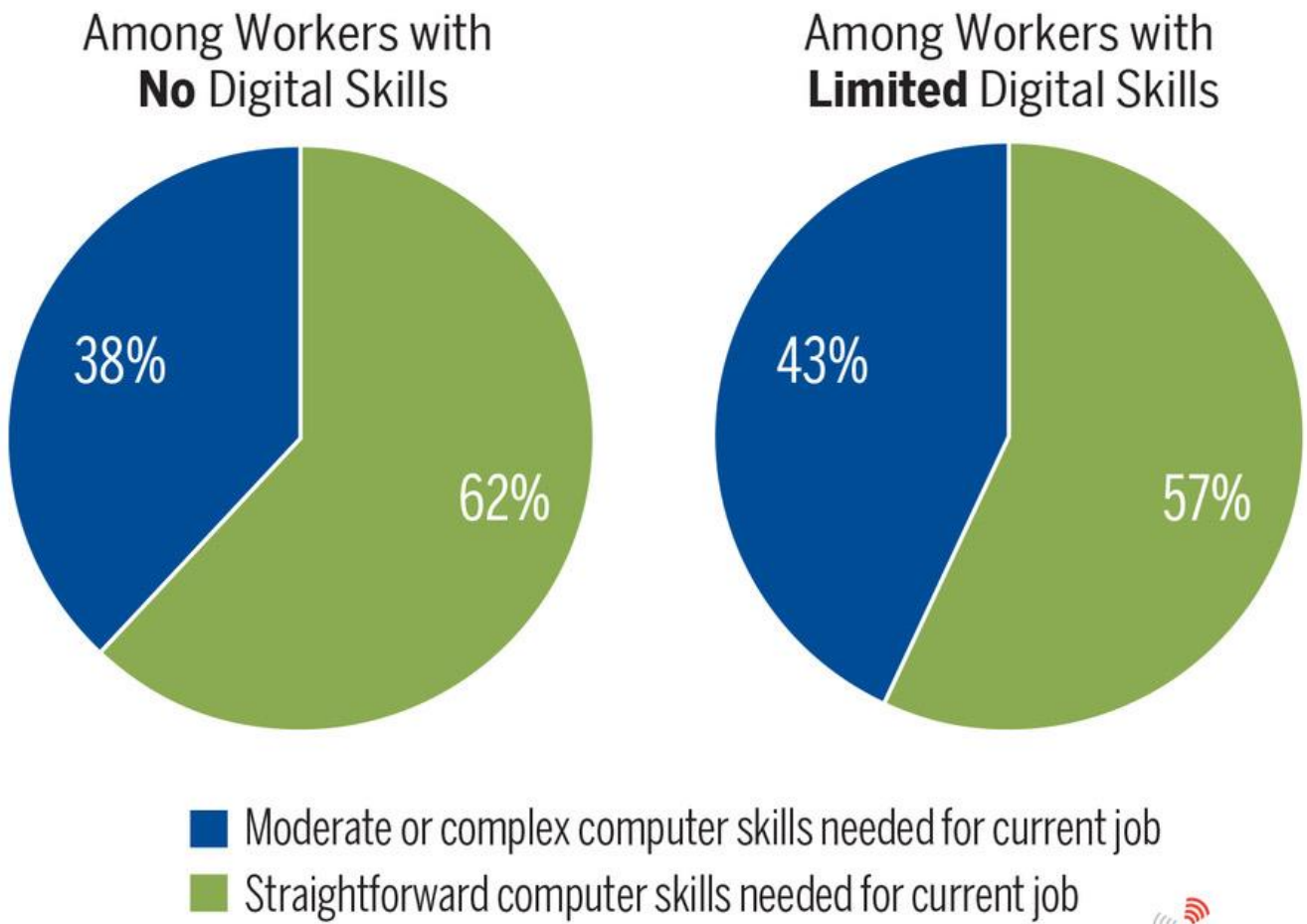
Among all US workers:

- 13% have no digital skills
- 18% have very limited skills
- 35% have achieved a baseline level of proficient skills
- 33% have advanced skills

Selected industries	Percentage of workers with no digital skills	Percentage of workers with limited digital skills	Combined percentage of workers with limited or no skills*
Construction, transportation and storage	22%	28%	50%
Retail, wholesale, and auto repair	14%	23%	37%
Hospitality and other services	18%	18%	36%
Manufacturing	16%	19%	35%
Administrative and support services; arts, entertainment and recreation	13%	22%	35%
Health and social work	12%	21%	33%
Finance, insurance, and real estate (FIRE)	6%	14%	19%*
Education	5%	11%	15%*
			NOTE: Numbers may not sum due to rounding.

Among US workers ages 16-64. Source: OECD Survey of Adult Skills, 2012-14.
Industries not shown due to low sample size include agriculture; mining; utilities and waste management; professional, scientific and technical activities; information and communications; public administration.

MANY WORKERS WHO LACK DIGITAL LITERACY HAVE JOBS THAT REQUIRE SUBSTANTIVE COMPUTER SKILLS



Currently employed US workers ages 16-64. Source: OECD Survey of Adult Skills, 2012-14

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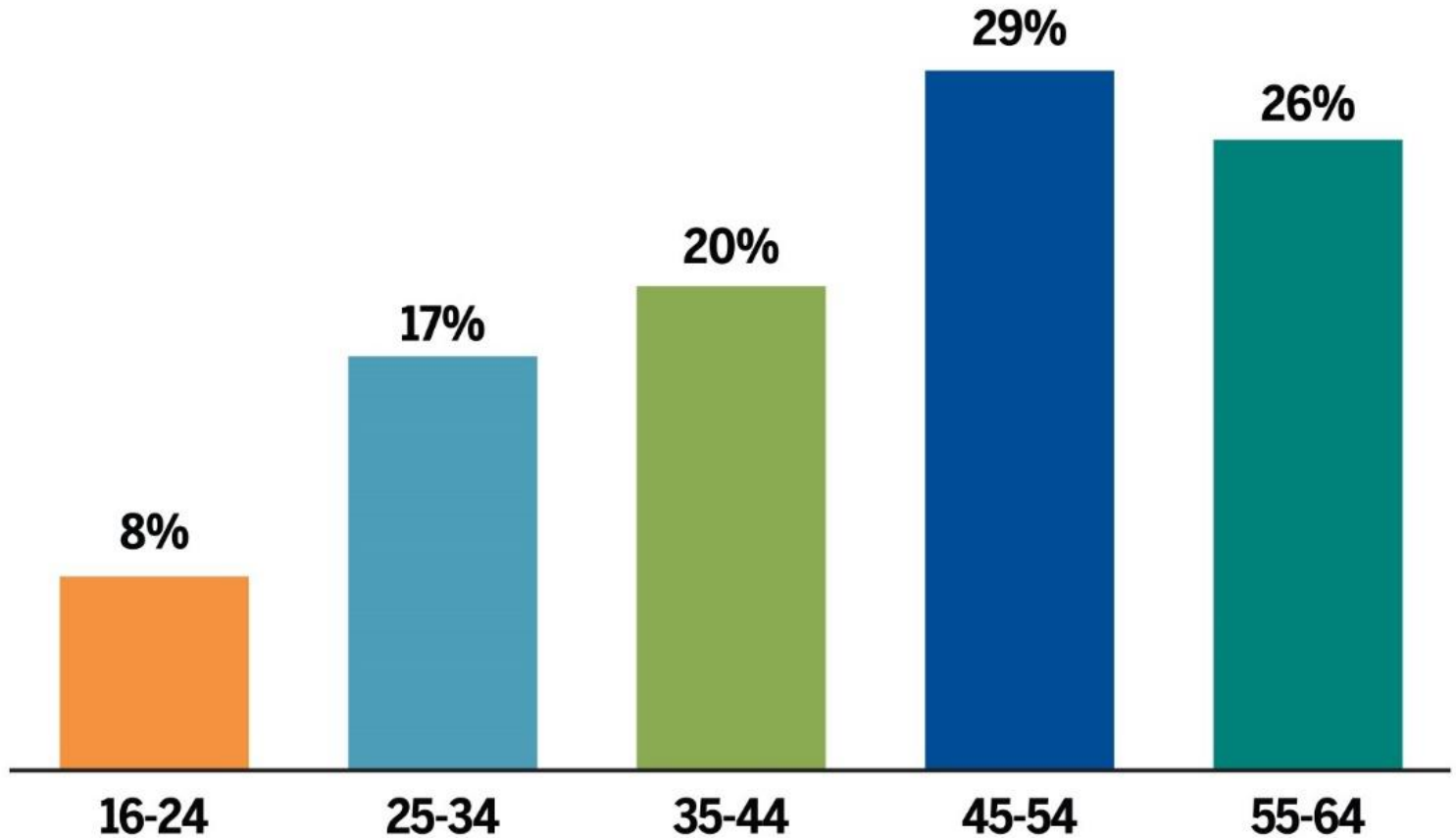
Delving in:
Workers with no digital skills

How we are defining "No" digital skills:

- **Workers who failed to meet one or more of 3 baseline criteria to even take the full digital skills assessment:**
  1. **Prior computer use**
  2. **Willingness to take the computer-based assessment**
  3. **Ability to complete 4 out of 6 very basic computer tasks, such as using a mouse or highlighting text on screen**

WORKERS WITH NO DIGITAL SKILLS EXIST IN ALL AGE GROUPS, BUT ARE MORE PREVALENT AMONG AGES 45+



Currently employed US workers ages 16-64. Source: OECD Survey of Adult Skills, 2012-14

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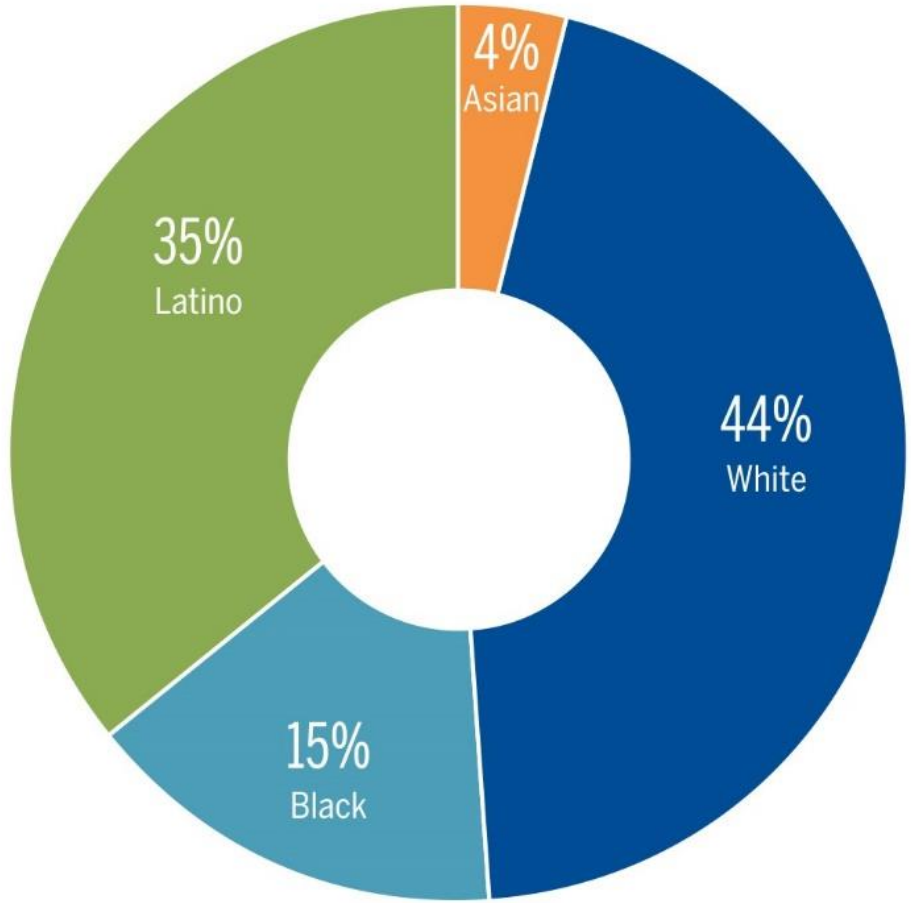
WORKERS WHO HAVE NO DIGITAL LITERACY SKILLS ARE DEMOGRAPHICALLY DIVERSE



Currently employed US workers ages 16-64. Source: OECD Survey of Adult Skills, 2012-14
"Other" category not shown due to low sample size.

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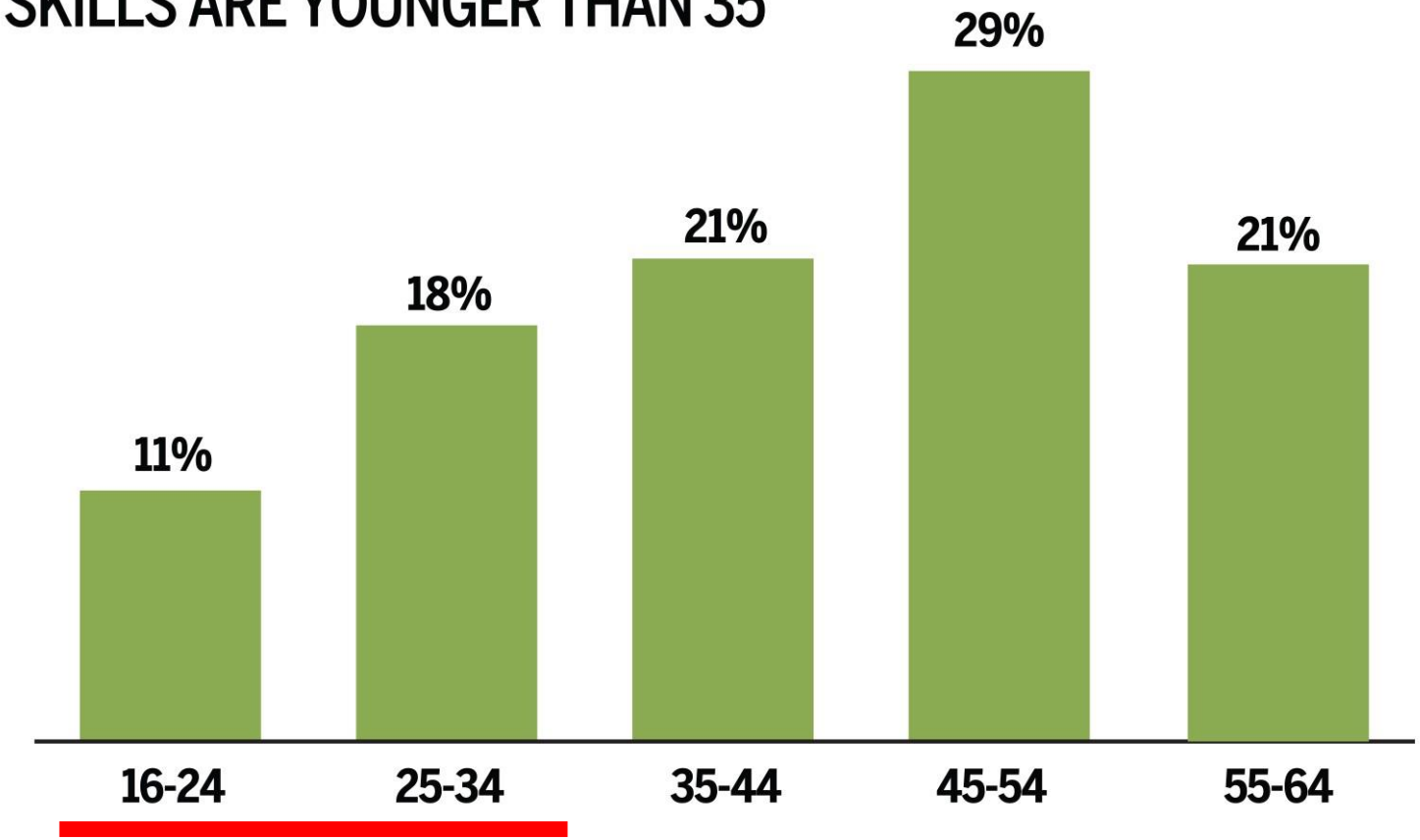
Next up: Workers with limited digital skills.

How we are defining "Limited" digital skills:

- Workers who can complete only very simple digital tasks with a generic interface and just a few simple steps
- For example, these workers might struggle to sort e-mails that respond to an event invitation into different folders

NEARLY ONE-THIRD OF WORKERS WITH **LIMITED** DIGITAL SKILLS ARE YOUNGER THAN 35



Currently employed US workers ages 16-64. Source: OECD Survey of Adult Skills, 2012-14

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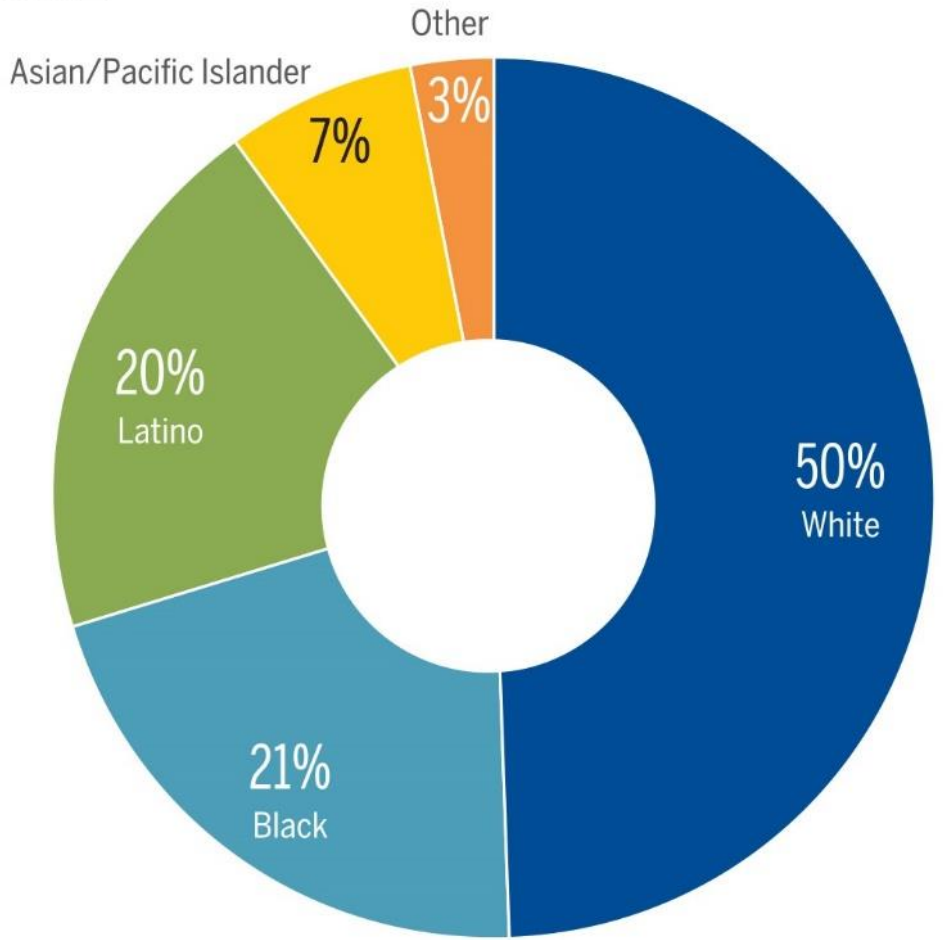
HALF OF WORKERS WITH **LIMITED** DIGITAL SKILLS ARE WHITE



Currently employed US workers ages 16-64. Source: OECD Survey of Adult Skills, 2012-14

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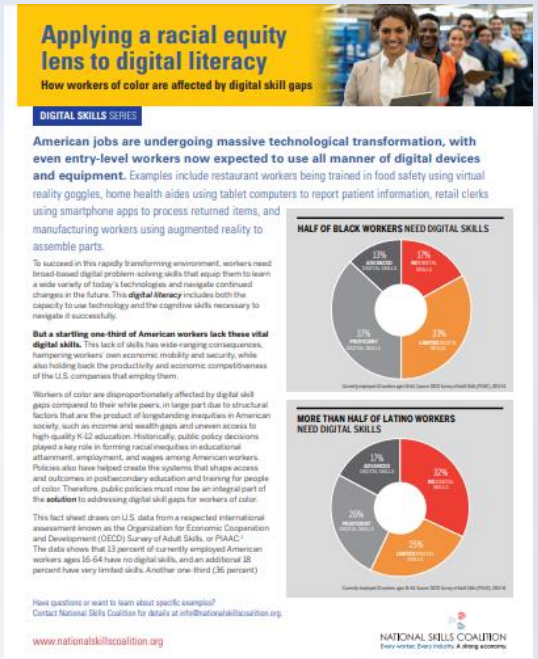
The pandemic is amplifying existing trends

- Workers with low digital literacy also tend to have low earnings and limited education
- These same populations are more likely to face layoffs due to the pandemic

Racial equity gaps are being magnified

- **Workers of color** are more likely to lack home broadband access and home computers
- Lack of access makes it **harder** to build digital skills



https://tinyurl.com/DLREquity

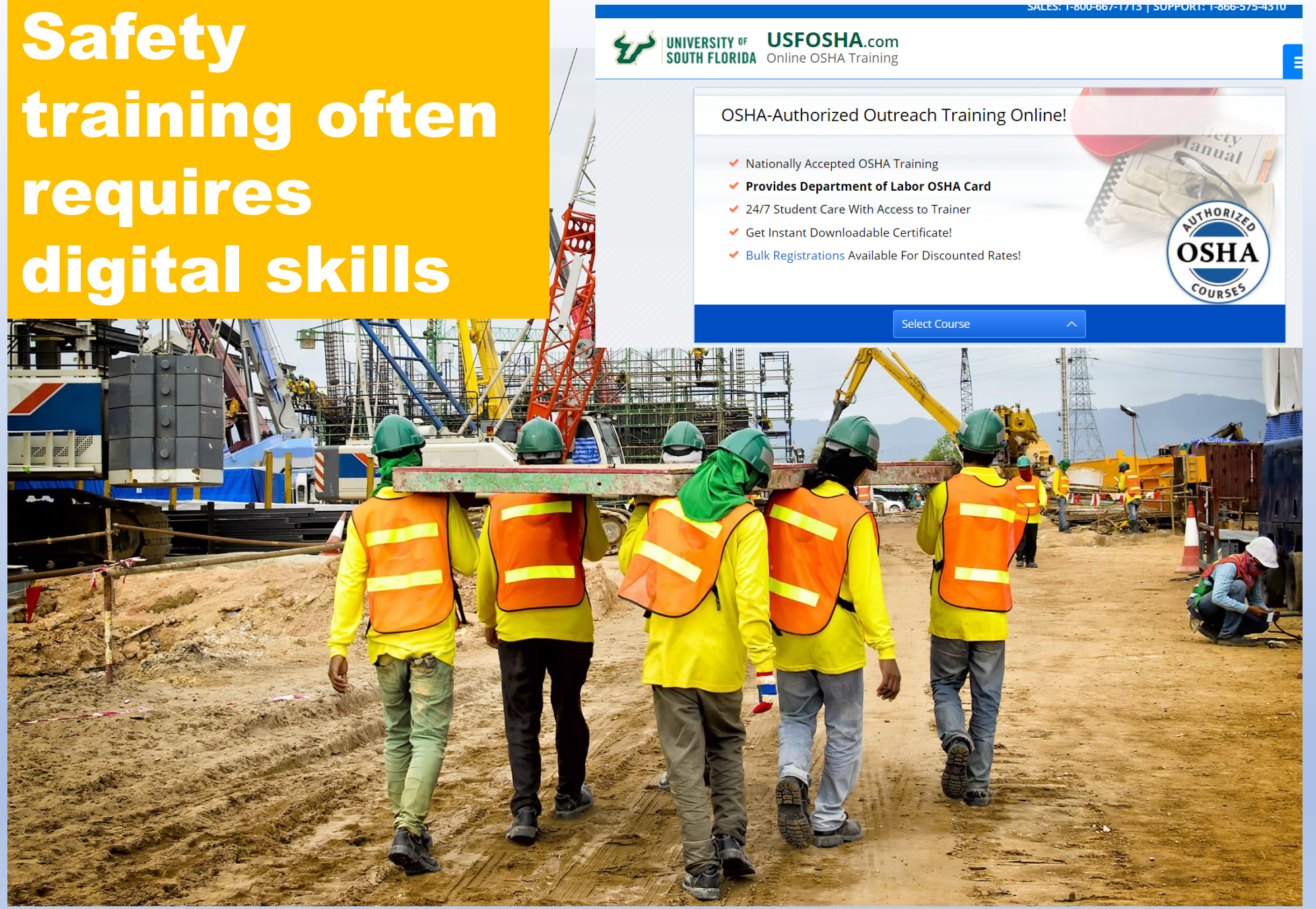
The pandemic is speeding up adoption of digital tools in the workplace.

Photo credit: Honeygrow/Kyle Huff

Even before COVID-19, use of digital tools was growing

- **Virtual reality (VR) is equipping Honeygrow workers to follow food safety protocols**
- **Kentucky Fried Chicken created a VR simulation "escape room."**
- **An animated Col. Sanders won't let workers leave until they demonstrate the correct 5-step chicken frying process**

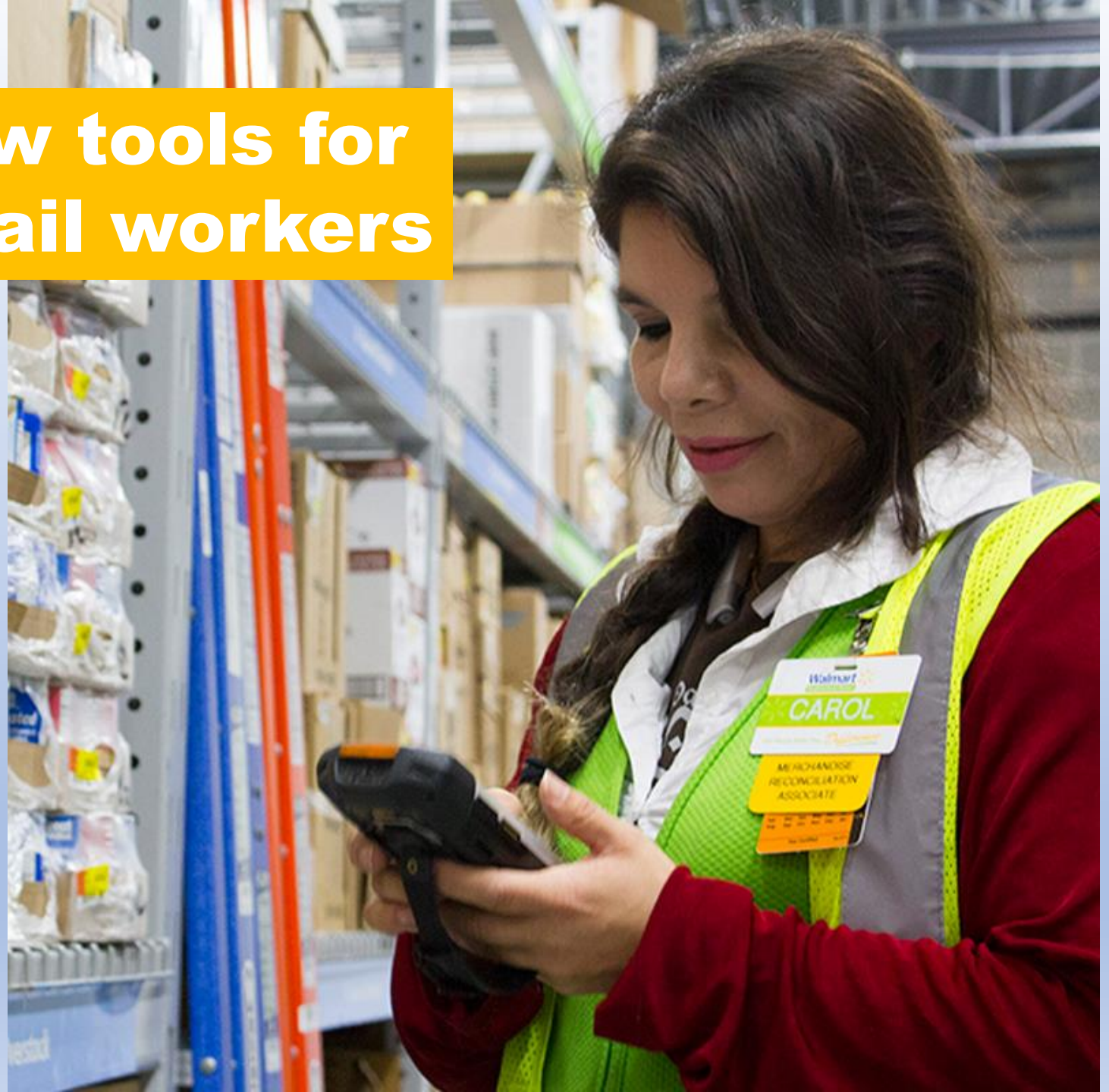
Safety training often requires digital skills



Construction workers are completing required training online

- **Mobile-first training** is now available for workers to complete on tablets or even smart phones
- Widely required training such as **OSHA-10 certifications** has been among the first to move online

New tools for retail workers



Retail workers are using customized apps

- Frontline Walmart workers use:
  - **Claims App** to manage returns and determine destination (e.g., resale, donation) for rejected items
  - **Price Change App** to efficiently manage shelf pricing updates

Voice assistants expanding in the elder care field

Yvonne Meyer, Los Angeles retirement home resident.
Photo credit: CNBC.

Home health workers are teaching their patients to use Alexa

- Libertana Home Health has deployed Echo Dot with Amazon Alexa at 5 independent living units in California
- Health and social workers teach clients how to use Alexa to summon a Libertana app to connect with caregivers, schedule medication reminders and appointments, and more.

American workers deserve our investment in their digital skills.

Deep dive data webinar:
June 3, 2020
2:00 p.m. Eastern Time

infusing equity into the conversation

Key Questions to Ask in Applying a Racial Equity Lens to Digital Literacy Efforts

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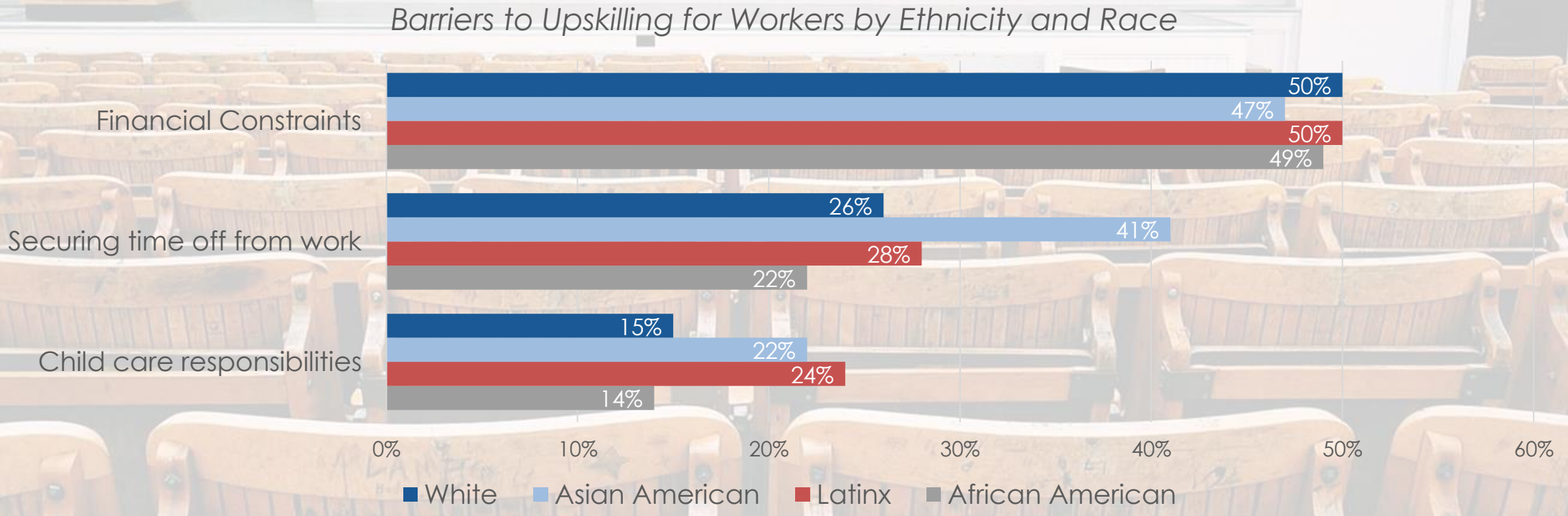
Current Snapshot

Your Responses from the Pre-webinar Survey

How is your organization serving those affected by Covid-19 disruptions?

Traditional education and training programs underserve workers at highest risk



Source: Joint Center for Political and Economic Studies

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Workers of Color are Overrepresented Among those with Limited or No Digital Skills

- Black and Latino workers are overrepresented among those with digital skill gaps, while the picture for Asian American and Pacific Islander workers is more mixed
- Insufficient data limits our understanding of digital skill gaps among Native American and multiracial individuals
- Immigrant workers' digital skill gaps track with U.S.-born peers, though English learners fare worse

Key Questions to Consider

1. How are new digital demands in specific industries and roles affecting workers of color?
2. How are new investments in COVID-19 rapid response supporting incumbent worker upskilling?
3. How do skill-building policies/programs connect to digital inclusion and expanded access to broadband and devices?
4. Is outcome data being **disaggregated by race/ethnicity**?

"Three Legs of the Stool"

An equitable response to the developing digital needs of workers and businesses weathering this crisis requires:

- Broadening availability of digital skills and training opportunities
- Expanding individual access to essential tools like digital devices
- Expanding individual and household access to functional, reliable home broadband internet

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PALLONE, CLYBURN, AND 10 HOUSE DEMS ANNOUNCE PLAN TO CONNECT ALL AMERICANS TO AFFORDABLE BROADBAND INTERNET

Apr 30, 2020 | Press Release

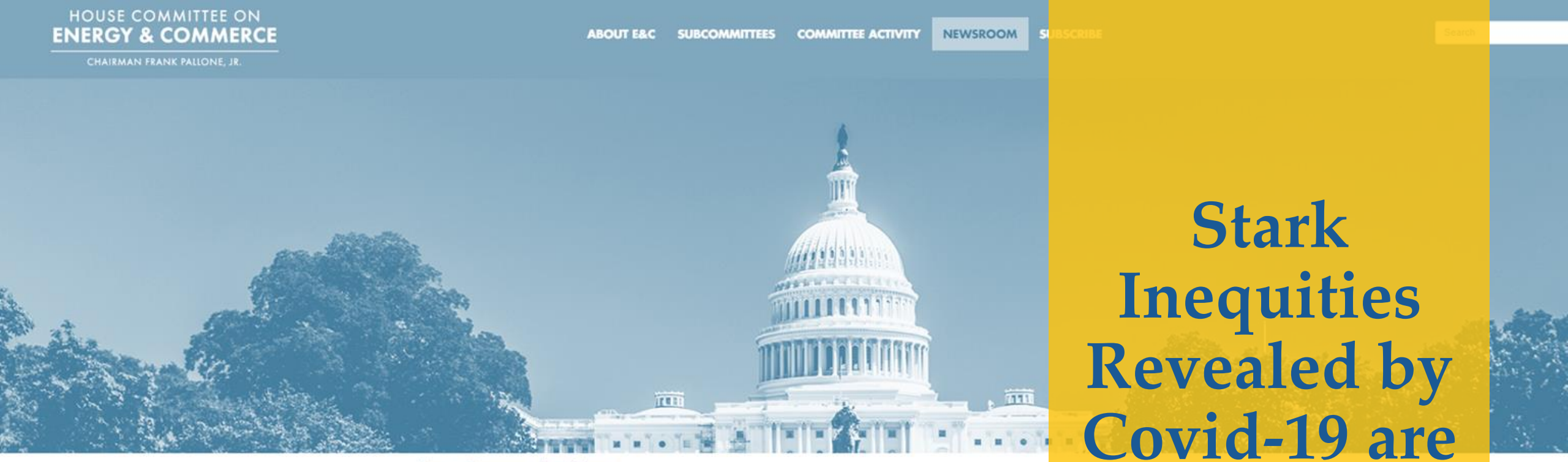
Washington, D.C. – Congressman Frank Pallone, Jr., Chairman of the Energy & Commerce Committee, and Congressman James E. Clyburn, House Majority Whip and Chairman of the House Democratic Rural Broadband Task Force, along with 10 members of the Rural Broadband Task Force and Energy & Commerce Committee, today announced the House Democratic Plan to Connect All Americans to Affordable Broadband Internet. This plan—an updated and expanded version of the broadband provisions of House Democrats' Moving America Forward Framework—is the product of significant collaboration between the Rural Broadband Task Force, the Energy & Commerce Committee, and many Members of the House Democratic Caucus.

The other members announcing this plan are: Communications and Technology Subcommittee Chairman Mike Doyle (D-PA), Congressman Jerry McNerney (D-CA), Congressman Dave Loebsack (D-IA), Congressman Marc Veasey (D-TX), Congresswoman Anna Eshoo (D-CA), Congressman Peter Welch (D-VT), Assistant Speaker Ben Ray Luján (D-NM), Congressman Paul Tonko (D-NY), Congresswoman Grace Meng (D-NY), and Congressman Mark Pocan (D-WI).

Democrats welcome recent reports that Republicans support the inclusion of broadband investment in the next coronavirus response packages. This plan will accomplish the goal of delivering affordable access to high-quality internet to all Americans.

NEWSROOM

Press Releases
Opinion Pieces



Stark Inequities Revealed by Covid-19 are Driving Federal Change

shifting to what works

Policy Solutions to Deliver Digital Skills Training Essential for an Equitable Recovery

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Current Snapshot

Your Responses from the Pre-webinar Survey

What, if any, policy concerns (e.g., budget) do you have as a result of Covid-19?

Policy Solutions for Emerging Challenges

Digital inequities exist in all layers of American society, creating a drag on U.S. productivity and worker economic security.

In response, National Skills Coalition, in collaboration with a broad-base of coalition partners representing adult educators, direct service organizations, small and mid-sized businesses and industry partners, crafted **policy solutions to meet the challenges arising from a digitalizing workforce and society**.

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Challenge: Not all businesses and training providers have the guidance they need to effectively upskill workers with digital skills for a changing economy.

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A new definition for an essential skillset

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Challenge: Not all businesses and training providers have the guidance they need to effectively upskill workers with the digital skills for a changing economy.

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Assess current and future industry demand for digital skills

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Challenge: States need support to develop programs that embed digital literacy in occupational skills training and other proven accelerated learning strategies.

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Create grant programs to encourage high-quality digital instruction

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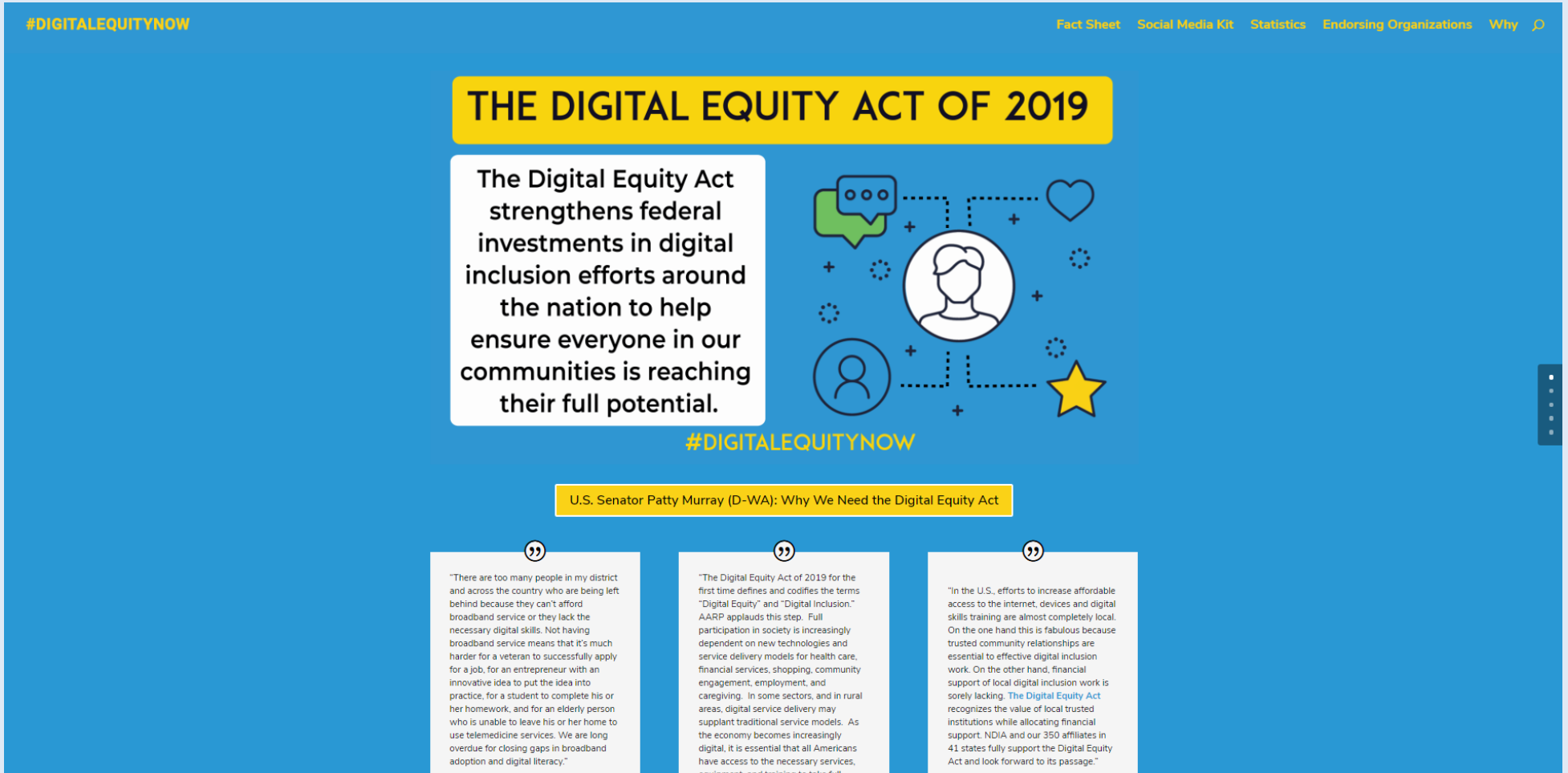
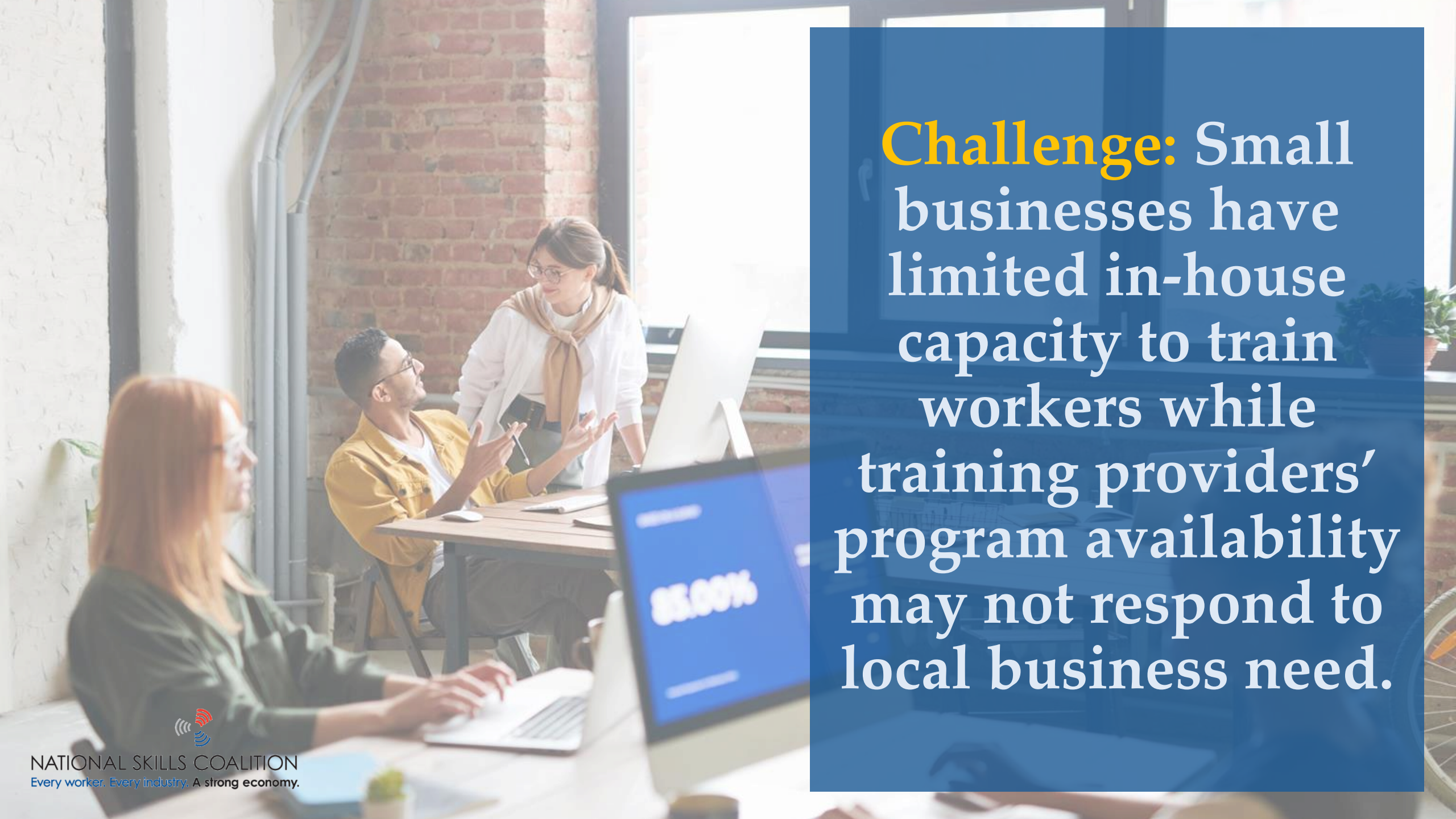
Digital Equity Act (HR 4486/S 1167)





Challenge: Small businesses have limited in-house capacity to train workers while training providers' program availability may not respond to local business need.

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Empower innovation through industry partnerships

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Challenge: Small and mid-sized employers need support to rapidly upskill their new and incumbent workforces to respond to the crisis.

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Incentivize private investment in upskilling incumbent workers

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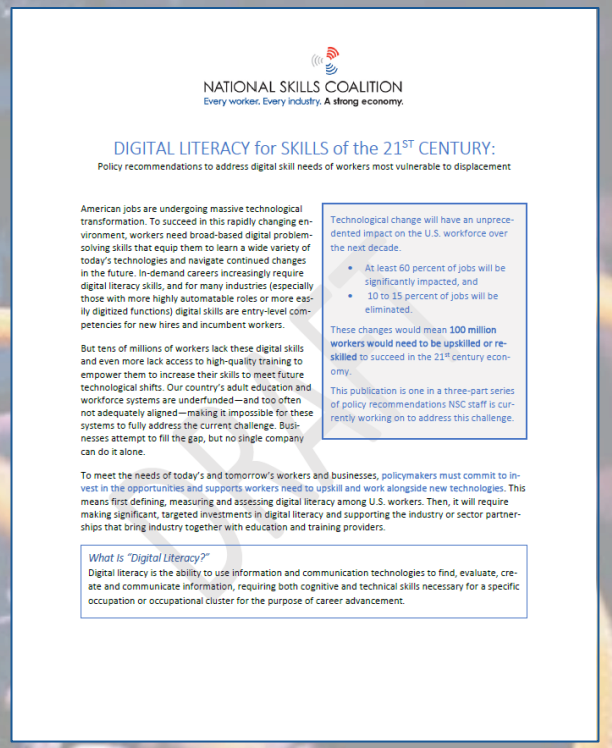
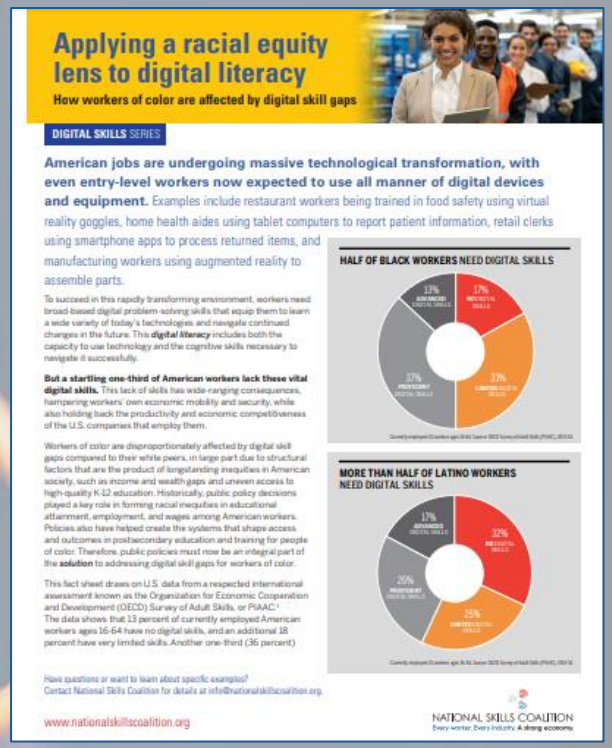
Upcoming Research





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Questions?

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DigitalUS

Building a Digitally Resilient Workforce:

Creating On-Ramps to Opportunity

DIGITAL US COALITION

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