

Attention: Yufanyi Nshom
Office of Workforce Investment
U.S. Department of Labor
200 Constitution Avenue NW, Suite C-4510
Washington, DC 20210

Submitted via email: DigLiteracyRFI@dol.gov

February 6, 2023

Dear Ms. Nshom:

National Skills Coalition (NSC) sincerely appreciates the opportunity to respond to the Department of Labor's Request for Information on digital literacy and resilience. As stakeholders in this important discussion, we welcome the chance to share our experience and observations with the federal government. We are especially mindful of the outstanding collaboration being modeled by DOL in its close coordination with the Departments of Commerce and Education, and the Institute for Museum and Library Services (IMLS), as part of this RFI.

National Skills Coalition fights for a national commitment to inclusive, high-quality skills training so that more people have access to a better life, and more local businesses see sustained growth. We build networks representing businesses, workers, colleges, community organizations, public officials, and advocates. We engage these networks to craft policy proposals and mobilize them to win concrete policy change. A major policy priority for our network and for NSC is creating and supporting inclusive digital skills policies so workers can access good jobs, and businesses can hire for in-demand positions.

In developing our response to this RFI, NSC has drawn on our extensive recent history of research on digital skills issues facing US workers and businesses. Our 2017 report [Foundational Skills in the Service Sector](#) highlighted the tremendous invisible costs to workers with digital upskilling needs – and the additional costs facing the businesses that employ them. Our 2020 report [The New Landscape of Digital Literacy](#) documented the widespread need for digital upskilling, finding that 31 percent of working-age US adults need to build their foundational digital skills. Our fact sheet [Applying a Racial Equity Lens to Digital Literacy](#) documented the disproportionate impact on workers of color, immigrants, and English learners due to structural inequities and historically racist policies.

Also in 2020, our [Boosting Digital Literacy in the Workplace](#) report drew on qualitative interviews with businesses and workforce and education leaders around the country to document the quickly evolving landscape of digital skills in the workplace. Our findings revealed that the pandemic had had a profound effect on digital transformation, with many businesses accelerating and compressing as much as 10 years of planned technological change into just one year. That same year, our [Amplifying Impact](#) short brief explored how combining English language learning and digital skills training is an effective program model.

In 2021, our [industry-specific fact sheets](#) highlighted the demand for digital skills across industries not always thought of as technological trailblazers, and our **Industry Recovery Panels** comprised of business leaders put digital skills at the forefront of their recommendations to the Biden-Harris administration on economic recovery. (Each Panel released a short publication: [manufacturing](#), [infrastructure](#), [retail and hospitality](#), and [healthcare](#).)

And just this week, NSC collaborated with the Federal Reserve Bank of Atlanta to release [**Closing the Digital Skill Divide**](#), a groundbreaking analysis of the real-time demand for digital skills in the US labor market. The report, based on 43 million “Help Wanted” ads posted in 2021, found that fully 92 percent of jobs today require digital or likely digital skills, and these numbers hold true across industries, across states, and for workers at every level of education and experience.

A crucial finding of this last report is the ***enormous breadth and depth in the types of digital skills*** demanded across industries in the United States today. To take just a few examples of how frontline, entry-level workers are using technology on the job today:

- Robotics in the logistics and warehousing sectors
- Cobots (collaborative robots) in the advanced manufacturing sector
- Scanner and point-of-sale technologies in the retail sector
- E-commerce software in the retail and business-to-business sectors
- Virtual reality software in the healthcare, food service, and information sectors
- Augmented reality software in aerospace industry
- Safety technologies, blueprint technologies, and other mobile applications in the construction sector
- Sensor technologies in the greenhouse industry
- Industrial Internet of Things (IoT) in the advanced manufacturing sector
- On-board tractor and harvester software and hardware systems (managing irrigation, fertilization, and other tasks) in the agricultural sector
- Artificial intelligence in the finance and information sectors
- Cybersecurity in the local and state government and utility industry sectors

As this research makes clear, ***today's digital skills stretch far beyond the traditional image of a white-collar worker sitting at a desktop computer***. DOL is to be commended for using this RFI to gather firsthand information from the field about how dramatically the landscape of digital skills has shifted in just the past three years. This is a valuable opportunity for DOL to understand the wide array of technological skills demanded in today's labor market, and the urgent importance of modernizing federal policy in response.

All of the research described above, as well as additional formal and informal qualitative data gathered through NSC's extensive network of workforce, education, and business leaders, has helped to inform our response to this RFI. Please see below for our comments.

Thank you again the opportunity to submit these comments. **Questions about this submission can be directed to NSC Senior Fellow Amanda Bergson-Shilcock** (amandabs@nationalskillscoalition.org) and/or **Policy Analyst Caroline Treschitta** (caroline@nationalskillscoalition.org).

Sincerely,

Amanda Bergson-Shilcock
215-285-2860 (mobile)

Before we respond to DOL's specific questions, we want to emphasize four vital overarching points:

1. ***Digital literacy and resilience are of urgent importance to adults and youth across their full lifespans and careers.*** Digital skills are not a "one and done" activity that will be completed at the end of a person's K-12 education or a single job-training course. DOL's future investments in this area should be guided by the principle that digital skills should be incorporated at every stage of education and workforce development.
2. ***Digital skills are dramatically more relevant and powerful when interwoven with other skills.*** As educators know well, contextualizing a new skill within the real-world context that a person will be using the skill is a highly effective learning modality. Learners are energized and motivated when they see a clear connection to their daily activities and their greater aspirations. DOL should ensure that its investments emphasize this context rather than supporting isolated, stand-alone digital skills classes.
3. ***DOL should capitalize on the momentum of organizations that already have expertise in andragogy (teaching adults) and have earned the trust of key populations.*** Adult education providers, community colleges, nonprofit workforce development providers and community-based organizations (CBOs), public libraries, worker centers, and labor unions are among the types of organizations that can offer this valuable expertise. It is far easier to help these organizations expand their technical capacity (either independently or through collaborations with partners) than it is to attempt to build this hard-earned social capital from scratch via new organizations or providers with no history of serving target communities.
4. ***In a fast-changing field, investing in the fundamentals has the most reliable rate of return.*** DOL cannot and should not attempt to "pick winners" among particular vendors or software. Rather, DOL should focus its investments on processes and tools that the field will need for many years to come. These should include: A) identifying and implementing opportunities to integrate digital skills throughout federal agency policy guidance and discretionary grant priorities; B) developing and validating additional digital skills assessments; C) researching and documenting promising practices for identifying in-demand digital skills and designing programs that help learners build those skills; D) creating and disseminating professional development resources; E) convening stakeholders for technical assistance and peer learning opportunities; and F) ensuring the broad dissemination of federally funded research and resources across the full panoply of workforce, education, and digital inclusion stakeholders.

Keeping these four points in mind, below we have responded to a selection of DOL's specific questions.

1. *Current Trends in Digital Literacy:* Please share how actors in the workforce development system, including education entities, libraries, community organizations, businesses or industry associations, and union or worker organizations, are currently engaged in digital literacy in the following areas:

(a) Assessing digital resilience for adult and youth learners?

With some notable exceptions, the overall field is still *very* early in its ability to define and understand the concept of digital resilience, much less assess it. Many workforce and education stakeholders are still primarily focused on helping learners build discrete digital skills. There is a great deal of room for growth in helping educators, workforce professionals, and policymakers make a “leap of imagination” to understand why digital **resilience** is important, how it can be fostered, and how it can be assessed.

The federal government has a vital role to play in facilitating this leap. A key task for DOL is to ensure that educators and workforce professionals have the tools and resources they need to design digital skill-building opportunities that support both specific skill development *and* broader resilience.

This starts with ensuring that DOL’s policies and grant solicitations explicitly emphasize the importance of teaching and assessing resilience, provide guidance and support for doing so, and avoid defaulting to narrow, product- or vendor-specific definitions of digital skills.

(b) Addressing digital literacy skill demands or skills mismatches for adult and youth workers seeking employment or training services?

There is no standard approach to this challenge at the present time. Instead, workforce development and education stakeholders across the United States use a variety of approaches, some more effective than others.

Many programs have **incorporated informal questions about individuals’ digital access and skills into their existing intake process**. Nonprofits such as ICNA Relief in Dallas, TX thus gather useful information as students enroll in their adult English language classes and can better target their services according to students’ current abilities and future needs.

Other programs **conduct formal assessments** or administer self-reported questionnaires to help jobseekers articulate the digital skills they already have and where they may need further upskilling assistance.

A minority of programs effectively **make having foundational digital literacy a threshold requirement to enroll**, because their intake process is conducted online. Needless to say, this approach (while potentially an efficient choice for programs from an administrative standpoint) can prevent many individuals from accessing needed services. More often, it simply adds an additional hurdle, so that the jobseeker or student must turn to a librarian, school counselor, friend, or family member to aid them in completing the online intake process.

Across all of these examples, **programs themselves often face a lack of internal capacity or expertise** regarding digital skill-building. Thus, they run the risk of providing unhelpful advice or training to jobseekers based on a misunderstanding of digital skill needs. (For example, enrolling all jobseekers in a generic Microsoft Office class regardless of the industry they plan

to work in, or encouraging pursuit of a particular vendor certification without having evidence that local employers value that credential.)

Leading organizations are weaving digital literacy skills training and assessments into existing training, rather than creating stand-alone classes. This occupational digital literacy helps workers develop specific technology-related skills needed in the context of other technical skills training for that occupation. Because this approach allows workers to build industry-specific but transferrable skills, it is more results-oriented than a focus on single, proprietary systems.

Leading organizations also focus on **fostering broad-based digital resilience** and a **sense of self-efficacy** among learners and workers. These skills are crucial to positioning workers to thrive over time in their career journeys, as opposed to simply completing a single class or program. Leaders also **use an asset-based approach to understanding workers' skills**. By starting from an assumption that every worker *already* possesses some expertise and abilities that can aid them in building digital skills, workforce providers avoid stigmatizing, deficit-focused approaches that can paralyze learners with shame or discourage them from pursuing training altogether.

DOL can support the leading practices in this area and ward off ill-advised practices by documenting and disseminating emerging practices, making sure that its guidance and solicitations select for good practices, and investing in research to further understand these complex phenomena.

(c) Upskilling employees in the workforce, including incorporating digital skills instruction and integrating digital technologies into occupational skills training?

In general, incumbent worker training (IWT) programs are uneven when it comes to digital skill-building. Among the [30 states that provide state-level IWT funds](#), some policies or program guidelines do not *explicitly* allow for the use of IWT funds for digital skills. This can make both employers and workforce program providers alike hesitant to pursue such training for fear that their expenditures will later be ruled ineligible for reimbursement.

Fortunately, this is starting to change. For example, **California's Employment Training Panel** recently announced a \$10 million solicitation for Workplace Literacy IWT funds, and [digital skills are explicitly named as an allowable activity](#).

Some specialized organizations have recognized the need for an explicit focus on digital skills, such as the nonprofit **Conexus Indiana**, which is helping advanced manufacturing firms prepare workers to [collaborate successfully with robots](#) as firms adopt new technologies.

(d) Identifying in-demand digital literacy skills and/or skills most relevant for the local labor market? Are industry or occupation-specific skills being identified?

Where this is happening effectively, it is on a case-by-case basis. Workforce and education stakeholders that already have strong relationships with local employers are best positioned to gather this kind of data. For example, the **Nashville (TN) Chamber of Commerce** has surveyed its members to better understand the demand for Google Career Certificates and related digital skills credentials. **Pima (AZ) Community College** is one of many higher education institutions

that routinely gather information about employers' digital skill needs as part of designing curricula for their noncredit workforce training programs.

A successful method for identifying in-demand digital literacy skills – as well as other skills relevant to the local labor market – is **creating, funding, and engaging in industry or sector partnerships**. Sector partnerships are collaborations of employers with education, training, labor, and community-based organizations to address the local skill needs of a particular industry.

Sector partnerships are an effective, proven strategy for helping workers prepare for jobs that require skills training, and for helping employers find skilled workers. They help to reduce speculative guessing about employers' skill needs (sometimes referred to as “train and pray”), and instead ensure that people are developing the specific types of skills – including digital skills – and earning the credentials that local businesses are actually seeking to hire.

Despite their proven effectiveness, there is no dedicated, consistent public funding for sector partnerships. They are an *allowable* use of funds under the Workforce Innovation and Opportunity Act (WIOA) and under short-term grants such as the Commerce Department's Good Jobs Challenge. But of the lack of consistent, dedicated funding hampers workforce leaders' ability to identify and respond to digital skill needs in their communities. ***Dedicated, ongoing federal investment is badly needed.***

(e) Creating and utilizing incentives to engage workers and job seekers in digital learning?

The most powerful incentive is a person's intrinsic motivation. When asked their reasons for participating in upskilling generally, workers often identify the desire to get a job, get a better job, or serve as a role model for their school-age children. These are powerful motivators on their own. Bearing this in mind, DOL should ensure that workforce providers can draw clear connections to help illuminate how digital skill-building can help workers achieve their overarching aspirations.

NSC recommends caution regarding incentives, which are tricky to administer and can have unintended consequences. (For example, workforce programs that offer tax incentives for participating businesses rather than reimbursement of training costs are often less appealing to *smaller* businesses, because they may not have the cash flow to wait a year to receive the economic benefit, or because they have less tax liability to begin with.)

(f) Developing/piloting innovative strategies and promising practices or projects to support digital resilience amongst learners?

Organizations that have a ***robust understanding of the assets and expertise that learners bring to the table*** are well-positioned to foster digital resilience, because they are already accustomed to designing programs and services that help people springboard from the skills they *have* to the new skills they *need*.

Many of these organizations have a strong, successful track record of serving marginalized populations. They include community-based organizations that serve immigrant populations,

nonprofits that work with formerly incarcerated individuals, and civil rights organizations, among others.

For example, the nonprofit labor-management partnership **Building Skills Partnership** has [incorporated digital skill-building into their broader efforts](#) to support leadership development, organizing, and occupational expertise among immigrant janitors and building-services workers.

Policymakers can defer to the expertise of these leading organizations and invest in their capacity, which will appropriately recognize the trust organizations have built over many years with community members, and will ultimately save time and money.

(g) What are some examples of promising practices in the field of digital skills training?

Promising practices include: 1) Contextualized or integrated education that equips people to learn digital skills in a real-world context appropriate to their industry or occupation; 2) Skilled instructors who have both digital and content-area expertise; 3) Use of an asset-based approach that doesn't stereotype or demoralize learners; 4) Employer-informed development of training programs and curricula; 5) Acquisition of industry-recognized credentials; 6) Financial support that covers the cost of training as well as the wraparound supports (childcare, transportation, etc.) that allow workers to persist and succeed in training programs.

(h) What are successful processes used by employers to share information on in-demand digital skills needed for their respective industry? How do employers share information with the public workforce system, including other employers, jobseekers and training providers?

There are no shortcuts to this process. The most effective examples demonstrate the enduring importance of shoe leather in building employer relationships. Workforce boards and training providers that are successfully gathering information on employers' digital skills needs are doing so through the same tried-and-true processes of relationship building, on-site visits, carefully designed and administered surveys, and other techniques that have long helped the workforce system respond to business needs.

(i) What are successful processes by which employers upgrade specific digital skills amongst their own workforces?

Tying digital skill-building to meaningful career progression opportunities is a best practice. Companies such as L'Oreal Cosmetics have paired their digital upskilling initiatives with clearly delineated career pathways that help workers see how skills acquisition will pay off in the future. Prior research has shown that employees greatly value the assurance that such pathways provide, because they remove some of the risk and uncertainty that often accompany a worker's decisionmaking about training.

In general, large companies are more able to design and implement in-house digital upskilling programs, while small and mid-sized enterprises (SMEs) are heavily dependent on the public workforce and education system to help prepare their talent pipelines.

(j) Which library systems and museums do you consider to be exemplars in teaching digital skills? What promising practices do these institutions utilize to serve the public?

One example comes from Tooele Public Library, located just outside Salt Lake City, Utah, in a more rural community. The library has had an intentional focus on supporting its patrons' digital skill-building for more than a decade, but has recently expanded this work using American Rescue Plan Act funds that support two part-time staff members. Key aspects of its Digital Me program include:

- **Small classes** to ensure that there are no “wallflowers” among learners, and participants can be hands-on at all times.
- A focus on “**changing the story that people have about themselves** in relation to being part of this technological world,” and building digital confidence, not just competence. Library staff emphasize the importance of giving people experiences to change their ingrained story about themselves and technology.
- **Timely turn-around**; making sure that people are able to start a class in their interest area within 30 days of their first phone call to the library. If there are not enough learners to launch a particular class, individuals get matched with a 1-on-1 tech tutor.
- **A baseline curriculum** (containing 40+ classes) that serves as a framework for most learners, plus the option for learners who want to focus on a different topic to work independently with a tutor.
- **Using peer learner stories** (such as highlighting senior citizen participants) to reassure and encourage tentative or hesitant community members to enroll in classes.
- **Collecting the bare minimum of personal information** from learners so as not to unnecessarily intimidate or prevent people from accessing classes.
- **Recognizing that the “pain point” around technology skills for many individuals is the disconnection they face** rather than a specific technical skill per se, and designing classes that help learners to form those connections (e.g., a senior citizen learning how to text his grandchildren; a local tribal member who felt such momentum from a single computer class that they immediately signed up for high-school equivalency classes).
- **Honoring the expertise learners already have**, as in the case of a formerly incarcerated woman who was successfully running a business with two locations, and simply needed to build the digital skills necessary to transfer her payroll system from a paper notebook into a software tool.

The library has also adapted some techniques from the research literature on social development strategy. In particular, having identified that **recognition** is important for learners, they designed a whimsical but mature (not childish) series of buttons for Digital Me participants to earn, which have been wildly popular. Each button reinforces the idea that people are developing a new aspect to their identity (*alchemist, time ninja, architect*) related to the digital skill they have acquired.

Library staff attribute the program's success in part to the fact that library leadership encourages a “growth mindset” rather than a “fixed mindset” when it comes to innovation, and supports iterative experimentation and learning by staff.

2. Challenges and Barriers to Digital Literacy: Please share identified mismatches, needs, and/or systemic barriers for stakeholders involved in digital literacy training:

(a) What barriers are individuals (adult and youth workers/learners) experiencing in accessing digital tools and/or training?

Logistical barriers, financial barriers, and informational barriers all affect individuals' ability to participate in training and upskilling opportunities.

Logistical barriers include:

- **Lack of broadband access.** People who live in neighborhoods that are not served by high-speed internet or who cannot afford the cost of connection face challenges in participating in many digital skill-building opportunities, especially those that rely on high-bandwidth video classes. Even graphics-heavy online tutorials can be expensive to participate in if a person relies on their smartphone for internet access and has a limited data plan.
- **Lack of updated digital devices.** Having a fully functional digital device is vital for participating in digital skill-building opportunities.¹ Individuals who are sharing a single digital device with multiple family members, or who have only a smart phone and no desktop/laptop, cannot participate equitably with their peers in digital workforce training – and sometimes cannot even access such training at all. Professor Amy Gonzales at the University of California Santa Barbara has researched the issue of “technology maintenance” and found that having old, slow, or out-of-date computers [can impact college students' stress levels and GPAs](#). Dr. Gonzales also authored a report for the nonprofit Digitunity, [Device Ownership Matters](#), on the importance of large-screen devices.
- **Rural or other geography-specific limitations.** People who live in small or rural communities can face a lack of availability of digital upskilling opportunities (because of the size/resource limitations of the community at large), or a lack of access (if the training opportunity is distant and not easy to travel to). In addition, people living in **any** size or type of community may struggle to access training opportunities if safety concerns related to violence or widespread drug use make it difficult for them to attend evening classes or travel within their communities.

Financial barriers

- **Having a low income or limited wealth** can affect individuals' ability to obtain broadband access or digital devices (see above). It can also affect their ability to pay tuition or other program costs out of pocket, pay for gas or transportation to program sites (for in-person training), or pay for exam fees or certification tests required to demonstrate their digital skills at the conclusion of a training program. These issues disproportionately affect workers of color, both because these workers are more likely to be in low-wage jobs, and because of the [racial wealth gap](#).
- One potential solution to these financial barriers **is to expand Pell Grant eligibility to short term, high quality training programs**. Current federal limits for Pell Grant usage are set at a minimum of 600 clock hours (or approximately two-thirds of a typical academic year) and 15 weeks in length. This leaves many in-demand programs in sectors that

¹ Only a tiny fraction of learning opportunities (such as Cell-Ed's English language classes) are designed to be accessible for students using older digital technology or flip phones.

include digital skills training such as health care, IT, and manufacturing ineligible for the federal Pell Grant program. Expanding the Pell Grant can help more students, especially nontraditional students balancing family and life commitments, access key digital skills training in in-demand sectors, and/or a first step in a new career path.

Informational barriers

- **Lack of knowledge about upskilling training options.** People who don't know where or how to build their digital skills can struggle to pursue training opportunities. Similarly, individuals may struggle to discern the differences between available training options (e.g., whether they are legitimate or a scam; how they can be paid for; whether they teach a digital skill that is of lasting value). These issues are magnified if key intermediaries in a community (such as workforce center staff, educators or guidance counselors, or librarians) also lack such information.
- **Lack of information about in-demand skills and credentials.** The nonprofit [Credential Engine](#) has documented 1.076 million different types of credentials in the U.S. Many of these degrees, certificates, certifications, and badges focus on digital skills. This dizzying array of credentials means that learners, educators, and employers alike often struggle to discern which credentials can meaningfully communicate value.
- **Lack of information about financial aid options.** While some digital upskilling opportunities are free to the participant, many others charge fees or tuition. Because so many of these classes take place outside a traditional higher education environment, learners and advisors alike often struggle to determine the potential cost of attendance and how it may be paid for (e.g., using public funds such as Workforce Innovation and Opportunity Act dollars, state-specific workforce training funds, employer tuition assistance, or out-of-pocket by the participant themselves).

b) What challenges are instructors and/or training providers facing when seeking to deliver digital literacy instruction and training to learners and/or workers?

Leading organizations and workforce partners are weaving digital skills training and occupational-specific but transferable digital skills training into existing workforce and training programs. However, at this time there is **not enough professional development support for program providers** and instructors on *how* to go about doing this. Sometimes, instructors themselves do not have strong digital skills, making teaching digital skills even more difficult.

Developing contextualized or integrated models of digital skills training can be slightly more time-consuming and complex, given that they rely on educators' back-and-forth collaboration with employer partners rather than simply purchasing an off-the-shelf curriculum. For this reason, it is **especially important that policymakers invest in the technical assistance, support, and professional development** that education and workforce providers need to develop these well-rounded models.

(c) What are common mismatches in digital literacy that employers are facing for newly hired workers as well as incumbent workers?

Common mismatches include:

- **Lack of clarity in job descriptions and lack of familiarity among Human Resources staff in how to screen for or assess relevant digital skills.** Research from National Skills Coalition² has found that job descriptions are often slow to be updated, even as jobs change quickly to require more digital skills. Similarly, the [dizzying array](#) of digital badges, certificates, certifications, and other credentials available in the US today mean that employers are often unsure or unfamiliar with which credential(s) can signal which skills, or how to describe the digital skills they seek, and therefore may not include them in job descriptions. Without accurate information about hiring managers' needs, HR staff and jobseekers alike can have difficulty determining whether a job is a good fit for a particular worker.
- **A disconnect between widely available digital skills classes and employer needs.** In particular, it is often much easier for jobseekers to find foundational skills classes (covering basic office software) or highly specialized software programming languages (e.g., Python) than it is to find opportunities to learn industry-specific digital skills. Leading workforce and education providers have begun to follow promising practices³ for intentionally weaving digital skills into the curricula for Career Technical Education (CTE) and other classes, but this is still far from a widely adopted practice.
- **Incorrect assumptions about workers' existing capacity or skills.** Employers and program providers often assume that younger workers are "digital natives" who already have all of the necessary skills, or that older workers are reluctant or ineffective users of technology. Both assumptions are frequently wrong,⁴ and can end up both hurting workers' ability to learn and grow, and costing businesses time and money. Similarly, implicit or explicit biases about race or gender can cause workers of color and women to have their skills and abilities under-estimated or overlooked in the workplace.⁵

(d) What resources are most needed by educators and training providers to address the challenges in providing digital skills training to individuals?

- **The most valuable and urgent resource needed is funding.** Ongoing, predictable investment can ensure that there is a sustainable system for meeting individuals' digital skill development needs now and as they change in the future. In particular, digital skill development should be explicitly included as an allowable cost in every DOL discretionary grant program for workforce training – such as dislocated worker grants, migrant and seasonal farmworker programs, the Senior Community Service Employment Program, JobCorps, etc. Affirming explicitly that these are allowable costs removes the guesswork for states and localities, and reduces the likelihood that over-cautious officials or program providers will avoid pursuing digital skills programming due to cost ineligibility concerns.
- DOL should also invest in **developing high-quality tools for digital skills assessment** and related data collection. A widespread lack of good assessments is hampering skill-

² [Closing the Digital Skill Divide](#) (National Skills Coalition, February 2023).

³ [Boosting Digital Literacy in the Workplace](#) (National Skills Coalition, 2020.)

⁴ These issues are discussed briefly in *The New Landscape of Digital Literacy* (National Skills Coalition, 2020.)

⁵ For more about how workplace bias can affect women and people of color in technology-related roles, see the work of the nonprofit [Kapor Center](#).

building efforts today, and lack of high-quality data is hampering policymakers and providers' ability to identify and respond to racial equity gaps, specific digital skill needs, and other aspects of digital literacy and resilience.

(e) What challenges are training program participants (adult and youth) facing, and where are there still mismatches in the digital literacy ecosystem (i.e., public school systems, libraries, employment service centers, etc.)?

As described above, one of the major challenges participants face is the financial barrier to entering the training programs at all. Even short-term training classes can cost too much for the average student or learner, especially with the growing number of nontraditional students who are also juggling life commitments such as caring for family members. One way to address this challenge is for Congress to expand the Pell Grant to include short-term, high quality training programs. These programs can often be the first step for a student or worker to enter into a new career pathway.

In the absence of Congressional action, DOL should take assertive steps to ensure that states and localities are aware of the full range of federal funding sources that can be applied to digital skill-building opportunities; to encourage and advise program providers who want to braid multiple federal investments together; and to incentivize clear articulation between adult education, workforce development, and higher education programs so that learners can easily progress along career pathways.

(f) What challenges or barriers are local entities facing when attempting to use new or existing funding to support digital literacy training for learners?

Overall, challenges include: Lack of clarity on allowable use of funds; lack of in-house expertise to accurately assess and decide on digital skill-building curricula, credentials, and tools; lack of reliable, validated, standardized assessments; lack of financial resources overall and lack of flexible funding in particular; lack of reliable local information on employer skill needs; lack of qualified instructional staff.

In particular, given the nature of public funding, including requirements for audit and performance reporting, many program providers are reluctant to use public funds for digital skill-building ***unless such use is explicitly permitted***. Unfortunately, many public funding sources are lagging behind in explicitly calling out digital skills as eligible for coverage. This is occurring both at the federal level and at the state level. In many cases, *no legislative change would be needed*; it is simply a matter of affirming that existing statutory or other authorizing language allows for the use of funds to build digital skills.

Among the enormous range of federal policies that *could* be used to support digital skills are the Workforce Innovation and Opportunity Act (WIOA) Titles I & II; Temporary Assistance for Needy Families (TANF); Supplemental Nutrition Assistance Program Employment & Training (SNAP E&T); Occupational Safety and Health Administration (OSHA) Susan Harwood Grants; Community Services Block Grants; Community Development Block Grants; Office of Refugee Resettlement grants; and Perkins Career and Technical Education funding.

While some federal and state agencies have taken positive steps⁶ in affirming that funding can be used for digital inclusion, ***DOL and other federal agencies can do more to formally reassure program providers that workforce and education policies can support digital skill-building***. This is especially important given that federal Digital Equity Act funding by itself is not nearly sufficient to meet the need for digital skills, and it is also time-limited.

3. Digital Equity and Inclusion: Please share what steps need to be taken by digital literacy stakeholders to ensure the following equity milestones are achieved:

(a) What additional resources are needed for workers of all backgrounds to access and succeed in digital literacy upskilling/training opportunities?

Financial barriers are a major challenge for many workers to access and succeed in digital upskilling/training opportunities. As a result, substantially funding these programs through the federal government, and ensuring digital skill building is a known, allowable use of funds in every discretionary grant DOL puts forth is key. Because so many of these classes take place outside a traditional higher education environment, learners and advisors alike often struggle to determine the potential cost of attendance and how it may be paid for (e.g., using public funds such as Workforce Innovation and Opportunity Act dollars, state-specific workforce training funds, employer tuition assistance, or out-of-pocket by the participant themselves). Financial support that covers the cost of training as well as the wraparound supports (childcare, transportation, etc.) that allow workers to persist and succeed in training programs is an important resource for workers to succeed in digital upskilling programs.

(b) How can programs ensure underserved and/or marginalized populations are adequately targeted for digital literacy training opportunities?

Rather than asking how to target learners, DOL should be cognizant that many underserved community members are *already* keenly interested in this topic and eager to learn more. However, they often face disconnects in that the organizations they know and trust are not those that are receiving public resources. Policymakers should focus on how to ensure that organizations that have already earned the trust of underserved populations are appropriately resourced to address their digital skill-building needs.

Federal agencies can incentivize collaboration between workforce training providers and other groups such as immigrant advocacy organizations, worker centers, adult education programs, civil rights organizations, or other nonprofit community-based organizations. These organizations should be integrally involved throughout the planning, creation, and implementation process of digital skills training programs. Partnering with these organizations centers the trust built with marginalized communities over many years, in comparison to creating and standing up new programs or facilities.

(c) How can digital skills/literacy efforts be integrated into ongoing worker preparation programs?

⁶ ["Federal government allows use of TANF, SNAP E&T and WIOA funds to support digital inclusion,"](#) (National Skills Coalition, June 24, 2020).

Please see NSC's other comments on this issue throughout this document.

(d) What interventions/supports can be utilized to support digital inclusion for all program participants? For example, are there issues centered around digital literacy resources being made available in Spanish and other widely-used languages, in addition to English?

While a handful of organizations and leaders are working on aspects of this challenge (such as Literacy Minnesota in translating its Northstar Digital Literacy Assessment and [Tyson Foods via its Upward Academy and DART programs](#)), overall there is a severe lack of robust research or documented best practices in multilingual digital skill-building.

Given that US Census data shows that 1 in 10 US workers is an English language learner, **DOL should make intentional investment in a research initiative** to better document existing practices and tools, and develop additional tools as needed.

This initiative should explore questions such as:

- How can workers' expertise with technology be measured even before they are fluent in English? Is a translated test the best way to do that?
- What tools are most effective in building both English and digital skills simultaneously?
- What do multilingual workers *themselves* identify as their digital upskilling priorities, and how would they like to pursue those aspirations?
- What organizations or groups (such as worker centers or faith organizations) have established strong, trusting relationships with multilingual workers, and how can those organizations be part of digital skill-building efforts?
- How can and should employers of English language learners participate in workforce development efforts, particularly those focused on digital skills?

4. Strategic Partnerships and Collaboration: Please explain how state, local, nonprofit, and business partners are collaborating to implement successful digital literacy initiatives:

(a) How are the most successful partnerships structured? Are there required partners?

The most successful partnerships are those that leverage the expertise and input of businesses, community-based organizations, training providers, and labor to create and implement workforce training programs. As described above, sector partnerships are collaborations of employers with education, training, labor, and community-based organizations to address the local skill needs of a particular industry. An organization with industry expertise, capacity, and credibility among partners is chosen to play a convener role.

Investing consistently in industry sector partnerships helps bring a pipeline of skilled talent to small and medium sized businesses, while allowing workers to get the skills training they need to get hired for jobs available in their community.

(b) Are there barriers preventing successful partnerships with business and industry partners at the state and/or local levels? If so, what are the barriers and what support is needed to overcome them?

As described above, a major barrier for successful partnerships between businesses and industry partners and training providers is **lack of dedicated, consistent funding** for industry sector partnerships. Further, ensuring that community-based organizations, labor, training, and businesses are all required partners can help ensure that all entities have equal seats at the table. The best industry or sector partnerships ensures that community voices, business, and all partners have equal voice and input.

Finally, it cannot be overstated that **building trust among community members and businesses and training providers takes time**. In Indiana, the industry partnership between Cook Medical Group and the Indiana Community College system is longstanding. The trust between these organizations cannot be built overnight, which is why long-term, dedicated, consistent funding to ensure that these partnerships have the time necessary to be successful is imperative.

(c) What is the role of employers in preparing new or incumbent workers for industry-specific digital skills, or how should workforce providers partner with employers? How might employer-specific digital skills be taught by the employer to build on skills taught by workforce grantees or training providers?

Employers play a significant role in **helping to identify in-demand digital skills and competencies**. However, only the largest employers tend to have in-house digital skill-building programs. Most small and mid-sized employers rely on the public workforce system, higher education system, and other third-party training providers to help workers build skills.

Regardless of the size of the employer, it is important to recognize that **workers need to build portable and transferrable skills**. That is, rather than focusing only on one proprietary type of blueprint technology app or electronic health record, they need to build comfort and capability with using multiple different kinds of blueprint apps or electronic health record software packages. This allows workers to be resilient over time as the demands of their jobs change and as they move between employers, which is an important factor in obtaining high wages.

For these reasons, workforce system partners should primarily draw on employers as trusted advisors in informing and designing digital skills programs.

(d) Are there any specific digital skills that workforce and education training providers should be responsible for teaching learners, such as how to type or navigate digital devices?

While it is certainly beneficial for workers to learn a baseline set of foundational digital skills, it would be a mistake for DOL to over-focus on *any* one skill or list of skills. As documented in NSC's [Closing the Digital Skill Divide](#) report, there were thousands of distinct digital skills sought by employers in recent job postings, and most jobs sought workers who had both foundational **and** industry-specific digital skills. These include everything from robotics to e-commerce to Enterprise Resource Planning software to safety technologies to Industrial Internet of Things and on and on.

In short, there are simply too many in-demand skills, and they are changing too quickly, for DOL to gamble on calling out a short list that training providers should be responsible for covering. (For more on the vast array of skills needed in today's workplace, see NSC's full report and see the comments submitted by Tyson Foods in response to this RFI.)

However, DOL certainly can and should invest in additional research to understand and document what it means to teach *digital resilience* – the very kind of adaptability that helps workers flourish in a changing workplace and economy – and how this can be institutionalized as a practice across workforce and education providers.

5. Federal Investments in Digital Literacy: Please share what support from the federal government is needed to advance national digital literacy attainment efforts:

(a) Which existing federal programs/federal funding sources are being utilized to support digital resilience?

States and localities have used a variety of federal funding sources to support digital resilience. Recently, states have drawn on federal legislation such as the American Rescue Plan, CARES, and other recovery sources to train up their workforce with digital skills. Many states also use their limited WIOA funds or federal discretionary grants such as American Apprenticeship Grants, to support digital skills training.

(b) Is additional federal funding needed for states/local governments to facilitate better services to the public?

Yes. Existing workforce development and education statutes have failed to keep up with the fast-changing world of digital upskilling and reskilling. Without a broad-based federal strategy, the leading organizations and programs on digital resilience will remain isolated examples.

Interviews conducted by National Skills Coalition with business and education leaders show that even successful local programs lack sustainability as they cobble together patchwork funding from a range of ill-defined sources, often struggling to prioritize digital skills among a myriad of other demands. The new Congress, WIOA reauthorization, and the Biden administration's commitment to racial equity all offer strong opportunities to create dedicated, sustained funding for digital resilience.

(c) What types of technical assistance and resources would be most valuable to build digital resilience capacity?

The US Department of Education's [Digital Resilience in the American Workforce \(DRAW\)](#) project has done a good job of documenting some of the types of professional development support and resources most needed by educators and workforce professionals. DOL should collaborate with their counterparts at ED to build on this base of knowledge and ensure that future technical assistance responds to the priorities and needs identified by practitioners across the country.