To: National Center for Education Research
                Institute of Education Sciences
                Department of Education

From: National Association of State Directors of Adult Education

Docket ID: ED-2023-IES-0011

The National Association of State Directors of Adult Education (NASDAE) (http://nasdae.org) appreciates the opportunity to submit comments to the National Center for Education Research (NCER) Request for Information on topics for the Research and Development Centers.

NASDAE represents adult education programs in the U.S. states and territories, authorized under Title II of the *Workforce Innovation and Opportunity Act* (WIOA). Adult education is an investment in the social, racial, educational, and economic equity of the nation and its states and municipalities. Adults who participate are investing their time to learn academic and workforce skills, improve their English proficiency, and attain secondary and industry recognized credentials. The programs funded under Title II of WIOA strive to help students overcome generations-long educational attainment and earnings gaps and to reduce the intergenerational impact of low educational attainment.

We are pleased that adult literacy continues to appear on the list of topics considered by NCER as critical to advance educational science. As the Program for the International Assessment of Adult Competencies (PIAAC) data has shown, there are many adults in the U.S. who lack strong foundational skills in literacy, numeracy, and digital problem-solving. These skill gaps are often magnified by systemic barriers and patterns of under investment in low income and culturally marginalized communities, resulting in vulnerabilities to health outcomes, economic stability, civic engagement, and social mobility. Moreover, the strength of intergenerational skills transmission has been shown repeatedly. Adults who experience skill gaps and systemic barriers struggle to assist their children to develop stronger skills and better life outcomes.

We respectfully request that NCER adopt a lens of intersectionality of the named topics, while examining the specific characteristics and needs of adult learning. As each of the eleven topics are explored, we request the adult learner be considered along with typically school-aged populations. The deeply intertwined nature of academic skills and other life outcomes necessarily limit the relevance of any single research topic. Additionally, our adult learners and their instructors need and deserve specifically-focused, research-based literacy and numeracy instructional practices and professional development, and we ask that NCER also recognize the complexity of adult learners and the settings in which they are taught and learn.

Numeracy is not identified on the NCER list of topics, but we encourage NCER to consider it as a high priority. The PIAAC data clearly demonstrate that low numeracy is a vast challenge in the U.S. Numeracy skills are intricately connected to health and financial consequences for adults. Numeracy affects a person's ability to make sound decisions for themselves and their families regarding medical and financial choices. Recently, the GED® Testing Service began working with states to identify testers who had a single remaining subtest unfinished of the four in the GED® battery; 80% of the subtests not yet passed were the math portion. We urgently need relevant research on instructional practices and professional development for practitioners in adult numeracy.

The National Reporting System for Adult Education (NRS) is constructed around the use of standardized assessments. This area of assessment development for adult learners and adult language learners has been under resourced for many years, yet an enormous amount of human and financial resources is expended in adult education programs assessing students, managing data entry, and purchasing standardized assessments. Data management and reporting at the state level is similarly cumbersome and costly. Digital literacy is a critical learning need and there is a lack of assessment to gauge need and measure progress in this domain. A framework of digital skills is needed to parallel with NRS levels. ***There is much interest in the field to identify more sophisticated ways to assess students, inform instructional practices, and determine progress and students' economic and educational trajectories, including longitudinal research.***

Adult Education serves individuals aged 16 and over, who are beyond the state defined age of compulsory school attendance and not currently enrolled in K-12 education. There is no upper age limit for participation, so age ranges within a class could span teenagers to seniors. ***We ne research on addressing this diversity of ages within the learning environment.***

The greatest number of adult learners are in the 25-44-year-old range, a prime working and family rearing time of life. In PY20-21, this age group was 51.7% of the total enrollment and this pattern has been true for many years. These adults are the parents and family members of children in preK-12 school. They are an essential resource for improving low-achieving schools. Understanding how engaging in learning by adult family members impacts younger family members, how engaging adults in children's education transfers success, and how educational institutions can be more explicit in these connections can unlock potential solutions to the decades-old challenge of low-achieving schools correlating with low parental engagement. ***We need relevant research on culturally competent parent engagement that recognizes multi-generational learning and educational involvement.***

We serve a significant number of young, otherwise disconnected, adults. In PY20-21, over 180,000 students between the ages of 16 and 24 were served in adult education. This age group has unique challenges and great potential while also demonstrating the intersectionality of all the issues raised in NCER' list of topics. ***We need relevant research on instructional practices and professional development for practitioner serving these young adults.***

We serve a significant number of incarcerated individuals and those who are re-entering the community. Even during the pandemic year of PY20-21, we served 69,000 individuals within correctional institutions and another 52,000 who self-reported as an ex-offender. For context, in PY18-19, adult education served over 136,000 individuals in correctional institutions. Correctional education settings present unique challenges to teaching and learning; many inmates struggle with other barriers to health, mental health, disability, trauma, etc., and teaching can be disrupted by events and staffing needs in the

facility. ***We need relevant research on instructional practices and professional development for practitioners serving in this setting.***

As NCER looks for research questions on early childhood education, we encourage NCER to consider early childhood education within the context of the family, household, and community. The research on intergenerational transfer of skills, health, and economic outcomes is well established. Early childhood educational research cannot overlook the importance of the adults in children's lives and development. The adult education program offers multi-generational programming through the four-component model of family literacy. In PY20-21, over 8,500 adult students were served in this model. Most states and programs would like to expand this programming but face challenges to do so because it is very intense, expensive, and requires committed partnerships with preK-12 schools. ***We need relevant research on multi-generational instructional practices and professional development for practitioners to serve adults and children in family literacy programming.***

The adult education program is a minority-serving institution, with an enrollment of 75.6% non-White students in PY20-21. This pattern has been true for many years. Student data is reported to the National Reporting System for Adult Education (NRS) disaggregated by race/ethnicity, age, sex, and barriers to employment. This disaggregated data could be utilized at the program, state, and federal levels to understand more about how adult education services could be better tailored to assist students to achieve their goals. ***We need relevant research on culturally competent instructional practices and professional development for practitioners.***

The adult education program serves a high percentage of English language learners (ELLs), and in some states, the ELL enrollment far exceeds the native English-speaking adult basic and secondary education enrollment. Nationally, nearly 50% of our adult education students are served in English language acquisition and integrated English literacy and civics education classes. Although this trend was disrupted in PY20-21, by all accounts, enrollment is coming back to trend. ***We need relevant research on instructional practices for adult second language learning for adults from a variety of language backgrounds including those who have little literacy in their native language.***

Many adult immigrants face a gap in their academic achievement that cannot be met by English language acquisition classes alone; they need instruction in the content area knowledge that they missed through disrupted formal schooling. We recognize how this need is preventing adults from achieving secondary and postsecondary education, occupational training, and economic stability. ***We need research, curriculum, and funding streams dedicated to assisting adults in building their native language literacy and background knowledge toward achieving a secondary credential***.

The ELL enrollment in Adult Education spans many levels of educational attainment. Current research suggests that Immigrant English Language Learners have a higher level of post-secondary completion than native born U.S. citizens (Batalova and Fix, Migration Policy Institute, June 2021). ***Research is needed on the universe of adult education English language learners to better understand the background of education, certification, and skills this population offers within the adult education system.***

The adult education program serves many adults with disabilities. From voluntarily self-reported "barriers to employment," over 33,000 students in PY20-21 indicated that they had a disability. Many more students have unreported or undiagnosed disabilities and chronic health issues that can interfere

with learning and achievement. ***We need relevant research on instructional practices and professional development for practitioners to serve our adult learners with disabilities.***

The adult education program serves adults transitioning to postsecondary education. In integrated education and training programs that include occupational credentialing classes, we serve adults who are simultaneously learning at the secondary and postsecondary level. Additionally, the adult education program serves adult immigrants who enter the program with postsecondary degrees from other countries, but need to improve their English language skills. In PY20-21, nearly 70,000 adults were served who indicated that they had already achieved at least one college degree. ***We need research that does not silo adult learners into "adult literacy" or "postsecondary" students; in many cases, these are the same students and, sometimes, taught by the same instructors. We need relevant research on instructional practices and professional development for practitioners in adult education and in postsecondary settings. We also need research on how to vastly scale up the practice of evaluating foreign transcripts and cross-walking foreign-earned credentials to U.S. credentials and licenses to address the potential workforce represented by these highly trained immigrants. As adult education has been expanded to include career training services in the adult education field, we need research to determine on specific short-term trainings and which ones offer the best employment opportunities in growth sectors.***

The adult education workforce is predominantly part-time and only partially composed of trained educators. In PY20-21, 39% of the 10,760 administrators were employed in the program part-time, 62.6% of the 50,504 instructors were employed in the program part-time, and 49% of the 2,028 counselors or navigators were employed in the program part-time. Many practitioners have other part-time or full-time jobs. The professional development that is delivered to these practitioners must be extremely focused, accessible, modular, and free of educational jargon and assumptions. The context for adult teaching and learning is strikingly different than K-12 and needs further attention by researchers. Examples include one-room schoolhouse/drop-in/lab setting students, turbulent attendance and classes with very limited contact time. Adult education instructors may be teaching out of their area of expertise and therefore professional development needs often are greater than can be addressed in single sessions or short opportunities. ***We need relevant research on how best to deliver professional development in such an environment that is so different from K-12 or higher education in which most of the teacher quality research is conducted.***

Though not named as a separate topic by NCER, digital skills are critical to achieving all the outcomes mentioned already. The pandemic disruptions brought this issue into the mainstream focus. Students and family members of all ages need to build their digital skills; all practitioners need to do so as well. Research on digital literacy should recognize that digital literacy skills and instruction are not separable from print literacy. Digital tasks require print literacy to navigate, and we need research on effective instructional practices that integrate print literacy and digital literacy into one cohesive framework. Additionally, as previously mentioned, there is a lack of recognized assessment to measure entry skill levels and progress in attaining skills. NASDAE submitted a response to the U.S. Department of Labor's recent request for information on digital skills and resilience which compiled member states' input. It is included here as an attachment. ***We need relevant research, curriculum resources, and professional development to address the growing and ever-changing need of digital literacy skill attainment and resilience.***

Following the comments from the Association, member states have shared their state-specific suggestions, which are appended. Any questions or requests for additional information may be directed to me by email at PTyler@nasdae.org.

Sincerely

Patricia H. Tyler
Executive Director

NCER RESPONSE – MINNESOTA ADULT EDUCATION, CAREER AND COLLEGE SUCCESS DIVISION

Top areas of importance from our perspective in Minnesota include:

- Effective writing instruction professional development for many adult ed teachers who have no formal background in teaching writing that provides an evidence-based framework for writing instruction in addition to instructional strategies and options for assessment
- Trauma and mental illness are mentioned only in the area regarding incarcerated individuals. Certainly this is true, but trauma-informed instruction for adults is critical for ALL adult learners. To date, trauma informed practices rely heavily on early childhood work such as ACES (Adverse Childhood Experiences), and more research into how this affects adult teaching and learning is critical.
- Additional research is needed on practices to improve student persistence and retention for adult literacy students.
- Research around best practices for synchronous online learning for adults
- Research into the effectiveness of the HyFlex model for adults

NCER RESPONSE – WASHINGTON STATE BASIC EDUCATION FOR ADULTS (BEDA)

Basic Education for Adults (BEdA) at the State Board for Community and Technical Colleges in Washington state advocates for research that focuses on longitudinal outcomes that occur when we don't put students in buckets – recognizing the value of adult learning programs that focus on the whole pathway from beginning English language instruction all the way to postsecondary credentials that lead to living wage work and further educational opportunities. In affirmation and extension of the research topics identified by the National Association of State Directors of Adult Education (NASDAE), BEdA is interested in research that:

- Contributes to the development of a national set of standards as well as measurement tools for teaching and assessing digital literacy and digital skill-building.
- Explores the right mix and delivery model for addressing students' basic needs in a manner that allows them to enroll in more classes, earn high school credentials, and successfully transition to postsecondary education and training programs and employment.
- Attempts to make sense of the various funding streams available to pay students' educational and life expenses, and identifies promising models for organizing and connecting students to this mix of aid.
- Takes into account native literacy and background knowledge that adult learners bring to their programs, including identifying ways that institutions can evaluate credentials and fast-track professionals with degrees and experience into comparable career tracks in the United States.

Date: February 6, 2022

To: United States Department of Labor, Employment and Training Administration (ETA)
          DigLiteracyRFI@dol.gov

From: The National Association of State Directors of Adult Education (NASDAE)

Re: NASDAE Comments to ETA on Digital Literacy and Resilience RFI
          Document Citation: 87 FR 75290
          Page: 75290-75294 (5 pages)
          Document Number: 2022-26461

The National Association of State Directors of Adult Education (NASDAE) (http://nasdae.org/) appreciates the opportunity to submit comments to the ETA in order to provide information on successful approaches and strategies, as well as challenges that education and public workforce systems are facing in the assessment, education, and training of digital skills, as these systems work to ensure that individuals and communities become digitally resilient.

NASDAE represents adult education programs in U.S. states and territories, authorized under Title II of the *Workforce Innovation and Opportunity Act* (WIOA). Adult education is an investment in the social, racial, educational, and economic equity of the nation and its states and municipalities. Adults who participate are investing their time to learn academic and workforce skills, improve their English proficiency, and attain secondary and industry-recognized credentials. The programs funded under Title II of WIOA strive to help students overcome generations-long educational attainment and earnings gaps and to reduce the intergenerational impact low educational attainment.

State Directors of Adult Education have contributed the comments below and appreciate the opportunity to provide input. Note that NASDAE members responded to a selection of sub-questions that are identified. Any questions or requests for additional information may be directed to me by email: PTyler@nasdae.org

Sincerely,

Patricia H. Tyler
Executive Director

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NASDAE Member State Responses to Request for Information document number: 2022-26461

1. Current Trends in Digital Literacy: Share how actors…are currently engaged in digital literacy in the following areas:

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

NASDAE Comment: *The promising practices shared by NASDAE member states are related to both student and teacher digital literacy growth. This theme continues throughout the responses: teachers are learners as well and deserve opportunities to learn and hone their skills. Statements that focus on skill progression emphasize the importance of contextualization of tasks, use of technology in relevant settings, and the importance of language learning alongside digital skills – both the language of technology as well as English for our multilingual students.*

Voices from the States:

- A promising practice in the field of digital skills training is the available access to training that allows practitioners to learn and implement the skills in their professional settings.
- The Pennsylvania Department of Labor & Industry has used some funding to award Digital Literacy & Workforce Development Grants to support effective programs that enhance foundational digital literacy skills for job seekers in their local community.
- Integrating technology into the adult education classroom so that use of it is familiar in various settings. Adding the option for students to attend classes virtually (synchronously or asynchronously) builds digital skills as well.
- Adult Education programs in Maine are partnering with the National Digital Equity Center to provide digital skills training. The Center facilitates the training and the adult education program advertises and connects learners to the training. Maine also provides licenses to the IC3 Digital Literacy credential to all Maine adult education programs so that they are able to offer their learners the opportunity to earn an industry-recognized credential. The State Office has focused on upskilling the digital skills of adult education staff and have offered digital skills training for staff in all roles. At Lewiston Adult Education, digital skills training includes contextualized instruction for multilingual learners. The teachers work together to make sure learners are supported learning English while learning the digital skills. Programs are also offering onboarding in-person to get learners set up and then offering the training remotely (or continuing in-person).
- Some examples of promising practices in digital skills training shared by Washington state are:
  1. Ensuring students have the vocabulary they need to successfully navigate computers and digital environments. This is critical for all students because they need to be able to understand the language related to computer components and software, including their functions and tasks that can be completed when using each technology. Students also need to have an understanding of the language needed in

order to understand and follow instructions and ask for assistance when using computers and other technologies.

2. Beginning with direct instruction. By providing students with explicit instruction, using modeling, and working within a controlled environment helps students to understand and develop the skills needed to succeed. [Topics] of direct instruction should include:
    o Computer basics
    o Parts of the computer
    o Software programs
    o Internet
    o Email
    o Calendars and other tools
    o Social media and networking sites; including privacy, safety, etc.
    o Problem solving
    o Information and Media Literacy (learning how to evaluate sources and find reliable, relevant information)

3. Moving students to relevant contextualized instruction as soon as they have mastered the basics. By providing students with opportunities to use computers and other technologies as a part of ongoing instruction, students continue to develop and expand upon their skill set which they can then transfer to not only assignments within the classroom but use in real-life contexts. Expanded instruction should include:
    o Critical thinking
    o Finding, processing, and analyzing information
    o Problem solving
    o Navigating systems

4. Providing fair and equitable access to all learners through loaner technology and hotspots and connecting students to low-cost options. This goal can be furthered by leveraging partnerships with libraries, volunteers, and businesses.

5. Using technologies that are relevant so that students are gaining access to and experience in the technologies they will need in the classroom and in real life. It is important that students are not overwhelmed with too much technology. Some things to keep in mind:
    o What technology do you plan to use?
    o What will it be used for?
    o Is it only for one activity in class or will it be used for multiple activities?
    o How can the technology be transferred to other classes or areas of a student's life and work?

- AEL providers in Iowa are required to incorporate digital literacy in instruction. This requirement is supported through program and content standards and resources such as the IDEAL (Iowa Distance Education and Adult Literacy) statewide initiative and Northstar Digital Literacy. IDEAL ensures high quality online courses that create opportunities to build participants' digital literacy while they gain the knowledge, skills, and abilities necessary to acquire a high school credential, transition to postsecondary education and training, and achieve living-wage employment. Courses are instructor-led, engaging, and adaptable to all levels of adult learners. All programs also employ

Northstar Digital Literacy to assess learners' digital literacy skills and provide targeted instruction.

- Promising practices shared from Virginia include starting all students on digital skills no matter what level or class they enroll in, using technology in class and for out-of-class learning, using digital literacy as a language development activity, and teaching a single contextualized skill at a time. Building confidence is key.

- In Ohio, local programs are encouraged to use the Teaching Skills that Matter (TSTM) Toolkit components that addresses Digital Literacy. Programs are encouraged to download the Toolkit which includes lesson plans and activities which can be appropriate and adapted for multiple adult education classes. All programs are required to integrated digital literacy skills into classes per grant requirements. Integrated Education and Training programs (IET) may address digital literacy pieces that are listed as gaps in employees that are recognized in regional workforce plans. Programs support the digital literacy development of adult students by teaching them how to use different technologies and incorporating technology into every class. Teachers and students use and create with Google tools such as Sheets, Slides, Docs, and Forms. Teachers also support student use of a variety of devices such as phones, Chromebooks, and computers for classwork and formative and summative assessment. Students use Google Classroom or Wakelet to access documents during class and when absent. In several classes, students have the option of participating synchronously through Zoom or Google Meets. Teachers demonstrate distance education programs and support student use of Aztec, Essential Education, Burlington English, USALearns and WorkKeys Curriculum. Programs started using distance education more than 15 years ago and have continued to build out opportunities. Our team developed a hands-on guide to digital literacy and has conducted between-term classes (Gap Classes) for several years. We worked with the college to pilot the Basic Computer Skills Course that is open to all.

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

NASDAE Comment (a, b, f): *The barriers (a) expressed by NASDAE member states are not new. The barriers of lack of access to affordable and reliable internet and devices, the inequitable coverage of rural areas, the cost of training opportunities, the reliance on shared devices or smart phones, language barriers, and the lack of time to devote to learning are all common themes in the literature on digital literacy and inclusion. NASDAE members also express the great need (b) for additional professional development, learning opportunities, and professional support for instructors who are themselves often facing the same affordability and reliability issues as their students. Local title II entities (f) face challenges of staff shortages and expertise, lack of a recognized skill gain for digital literacy in the accountability system, challenges with adequate funding for initial purchases and sustainability, and the realization that accessing future dollars through the Infrastructure Investment and Jobs Act will not be simple for existing providers and funders.*

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

Voices from the States:

- Access to internet and equipment in rural areas, as well as a lack of available in-person instruction. Financial support to allow individuals to study and train instead of working multiple jobs and/or working more than full-time.
- Challenges/barriers include access to certain technology tools and equipment for learners. Additionally, some challenges are lack of training opportunities available to personnel.
- Lack of infrastructure in rural areas and cost for reliable internet.
- Language is a barrier for our multilingual learners. Most digital skills curricula are written in English and the text complexity is difficult for many multilingual learners. Access continues to be an issue. While many programs have technology lending libraries and hotspots, there are still deserts within the state with no access to cellular service or internet. Transportation is also a barrier for prospective learners in rural areas to get to a training.
- Lack of broadband access: People who live in areas 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. This is especially true when opportunities require access to a high-speed connection. While some may have a Wifi hotspot available via their phone, participation in opportunities can be expensive if a person has a limited data plan.

  Lack of updated or current technologies: Having a current, fully functional digital device is critical for participating in opportunities. Adults who share a device with other family members or have only a smart phone do not have the opportunities to participate in opportunities equitably, and in some cases, they may not be able to access the training at all.

  Geographic limitations: People living in rural areas or smaller communities experience a lack of access to opportunities either because of size or resource limitations of the community or a lack of available programming that doesn't require travel or online access.

  Financial Limitations: Individuals with a low income and/or limited wealth are not able to obtain broadband access or digital devices. This can also affect their ability to pay tuition or other program costs out of pocket, pay for gas or transportation to travel to in-person training, or pay for fees for exams and certifications needed to demonstrate skill acquisition. Individuals of color are disproportionately affected by this because they are more likely to be in low wage jobs, and are impacted by the racial wealth gap.

  Lack of knowledge about training options: If people don't know where or how to build their digital skills, they can struggle to access and take part in training opportunities. In addition, even if people have access to information on training opportunities, they may not be able to evaluate whether the program is a legitimate training opportunity.

  Lack of information and knowledge about financial aid options: There are some digital upskilling opportunities that are free; however, most are not free and if they are not offered in the context of a traditional education program, finding ways to pay for them becomes more challenging if people are not aware of possible funding sources.

- Individuals in this largely rural state continue to experience multiple barriers to accessing digital resources (broadband and devices) and training, including distance from resources, low- and or limited-income status, and lack of information about available resources to support instruction and support. While existing AEL programs have invested in outreach and devices to support learners and workers, current resources are not sufficient to fully address the need.
- Access to affordable broadband, devices, etc. is a real issue for adult education students. Time to learn digital skills is also a challenge.
- Competition of services. Not being able to offer standalone digital literacy activities with funding. Rural parts of our state not having towers to provide Internet service.

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

Voices from the States:

- Lack of training among instructors, as well as staff vacancies in addition to part-time staff instead of full-time.
- The biggest challenge is access to technology that can enhance the instructional process for learners in the classroom. Advanced technology is expensive and often overlooked during a budgeting process. Therefore, as technology tools devices expand, instructors are not provided with up-to-date technology to prepare learners.
- Many adult education instructors are lacking digital literacy skills themselves. Most existing adult education resources sold by publishers do not consistently and seamlessly incorporate activities that support digital literacy skills development.
- The lack of time for our mostly part-time instructors and the varying levels of digital literacy that students come in with present challenges.
- Language support in contextualized instruction and technology access. Programs can provide technology for learners, but they may not have reliable access when they are home. Onboarding support can also be difficult, both the time and staff to lead it.
- There is not enough time in adult education classrooms to incorporate digital learning in a sufficient capacity, along with all of the other required components of adult ed. For instance, instruction using CCRS, employability skills, specific occupational instruction for IET, etc. are all required. There is too much to teach in a short amount of time. Another challenge to adult education is having many learners who do not have the equipment or connectivity to work from home, making it necessary to deliver in-person instruction when experience with online and virtual learning platforms would be of great value to the students.
- Even though organizations and workforce partners are incorporating digital skills into existing workforce and training programs, there is a definite lack of professional development and support for providers and their instructors on how to do so. In addition, in some cases, instructors themselves lack digital skills which creates an additional barrier because they themselves are not comfortable creating materials or teaching digital skills. Furthermore, it takes time to develop contextualized programs that incorporate digital skills, and off-the-shelf products rarely meet all training needs. It

is critical that investment is made not only in access and training programs, but also in the professional development and digital skill building of instructors.

- While programs are incorporating digital skills into courses, workplace literacy, and training, professional development to support such activities is limited. State and local efforts to elevate instructors' digital skills support student learning but more professional development and technical assistance is needed to support the development of digital skills training that is contextualized to in-demand jobs and career pathways.
- Instructors need to learn digital skills and tools, too, but the amount of paid time to do so is very limited. Our teaching workforce in Virginia is 95% part-time and there is a lot of turnover among instructors. Instructors who try to infuse technology into the classroom struggle with the multiple levels of digital literacy present among the students. Many of our instructors are facing the same challenges as our students with unaffordable or unavailable high-speed internet at home, and even some of our facilities have unreliable connections.

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

Voices from the States:

- In existing funding streams, there is usually not enough to purchase or update technology equipment. This creates a barrier of use of up-to-date technology in the classrooms.
- For Title II providers, there are no NRS-approved assessments to show measurable skill gain in digital literacy.
- Staffing continues to be an issue. It's difficult for adult education providers to offer competitive salaries for positions to support technology use. Equity in technology is another barrier. The devices or technology often depends on the local school district's IT policies and procedures, not the needs within the adult education program. Providers also have difficulty with keeping up with the changing technology and needing new devices. As tech changes, it requires time for staff and learners to "learn" the new technology.
- Lack of adequate funding mitigates the ability to provide additional digital literacy training for our learners.
- Because digital skills are not specifically called out in existing funding sources, many administrators are hesitant to leverage existing local and federal funding streams. Additionally, even in funding streams where digital skills instruction is an allowable activity, additional reporting and monitoring requirements may be barriers to doing so. Finally, there are currently no standard student learning outcomes (SLOs) or assessments for digital skills acquisition and programs are hesitant to provide instruction when they don't know what skills they should teach at which level or how to measure them. Programs may also be hesitant to incorporate digital skills because they are not getting credit for student gains in this area. Adding language to existing funding sources such as WIOA, Titles I & II, TANF, SNAP, etc. specific to digital skills instruction,

as well as creating SLOs and assessments which would allow measurement of skills acquisition and reporting skills gains, would most certainly encourage more providers to move in this direction.

Funds from the Infrastructure Investment and Jobs Act, especially the Digital Equity Act funds, are coming to states through the Department of Commerce, which has not typically been involved in funding that includes instruction on skill building, or in education and training programs which usually receive funding through departments of Education and Labor. States are struggling to figure out how to collaborate with their Commerce or Broadband agencies to ensure that current federal investments at the state level, and the expertise that comes along with those funding streams, can be leveraged as the Infrastructure Act funds flow into the states. Programs also have to take supplanting into consideration as they learn how to braid funding from multiple federal sources.

- Perhaps the biggest challenge local providers have faced when attempting to use funding for digital literacy training is understanding that it is permissible and, specifically, what are allowable expenditures. At times, they also have had to educate organizational and financial leadership that digital skill building is not only necessary but encouraged so that programs can use new and existing funds to meet learner and workforce needs in the communities they serve. Affirmation and clarification of these issues during the Covid-19 pandemic was extremely helpful and continued formal reassurance that use of funding for digital literacy is an essential and allowable use of program funds is needed.
- Although funds may be available for initial device purchases, sustaining technology and providing technical assistance is a challenge. There is no dedicated funding stream to support digital literacy skill development.

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:

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

NASDAE Comment: *NASDAE members strongly emphasized that tailoring digital skills programs to underserved and/or marginalized populations should involve strong partnerships with community organizations and entities that are already known and trusted in these communities and that native language outreach and teaching is imperative.*

Voices from the States:

- Specifically targeting underserved and/or marginalized populations with research to determine the real unmet need, as well as supporting those programs that already serve underserved and/or marginalized populations.
- Obviously, an assessment of program and digital literacy needs should be considered and used a general baseline in comparison with programs of similarity. In a perfect world, being able to provide access to technology equipment and internet would be a step in the right direction for all learners.

- Ideas to reach underserved populations include efforts to:
    - Offer device and hotspot lending programs so that everyone can access training.
    - Marketing campaigns that are both digital and paper to reach all people.
    - Advertise to those markets on social media, newspaper, word of mouth, door-to-door in areas where the underserved live
    - Provide students with computers, mobile hotspots, and tablets
    - Offer open enrollment
    - Offer free training and expand workforce training
    - Work with state agencies, such as public assistance entities
    - Offer free classes at easily accessible public places
    - Establish learning sites at community spaces such as the food pantries, school supply drives, Christmas toy drives, Angel tree giveaways, clothing drives, etc.
- Adult learners, especially English Language learners, are eager to learn; however, they do not know how to access programs. Or, they know how to access programs, but are unsure how they can leverage the benefits they are receiving to fund their training. This is in part because marketing materials are often not accessible because they are posted online only (provider websites, Facebook, etc.) and students are not able to locate the information. In addition, marketing materials are often written at a language level that is not accessible to lower-level English Language Learners. When marketing, it is important to create materials that are easy to understand and access, and it is critical that materials are created in both English and the languages of the community members programs seek to serve.
Enlisting organizations students already know and trust (Community Based Organizations, Churches, children's schools) to market programs via bilingual flyers would help spread the word. In addition, flyers posted at local businesses such as grocery stores, which serve a specific population, as well as newspapers, radios, and TV stations that have programming in native languages can also be a mechanism for informing English Language Learners about programs.
Emphasis needs to be placed on allowing the use of WIOA Titles I-IV, Perkins V, Digital Equity Act funds, and all federal education and training dollars to support digital skills instruction. Additionally, programs and organizations that have already earned the trust of underserved populations need to have adequate resources to meet their clients' needs. This can be done by incentivizing collaboration between workforce training providers and other groups such as immigrant advocacy organizations, adult education programs, civil rights organizations, or other nonprofit community-based organizations. Programs and individuals need clear guidance for serving undocumented populations without fear of harming future citizenship efforts or otherwise being a long-term detriment to the participant.
- Programs can ensure underserved and/or marginalized populations are adequately targeted for digital literacy training opportunities by partnering with programs that are already successfully serving those populations, e.g., programs that serve immigrant and refugee populations, especially for the development of Integrated English Literacy and Civics Education (IELCE) and Integrated Education and Training (IET) services. Many providers partner with such programs through referrals but engaging them in IET and

IELCE efforts could be one way to advance digital literacy training among underserved populations while strengthening ties to partner agencies and organizations.
- Adult-serving programs need to partner to meet this need and provide frequent and freely available access and support in community spaces and in students' languages. Currently there is no funding stream for this type of network development, community teaching, or sustainability.

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

(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?

NASDAE Comment: *NASDAE members expressed a responsibility to teach basic digital literacy and skills as integral parts of their programs. Many examples were proposed, but members also expressed a need to better define appropriate sets of digital skills and digital literacy components, incorporation of digital skills across a curriculum and program, and contextualization of those skills to particular workforce pathways.*

Voices from the States:

- How to access educational resources and career development information and services.
- Yes, there should be at least some form of introductory class/requirement or availability to learners who lack digital skills. Providers should be responsible for exposing learners, yet without having to consider class size etc.
- Adult education providers could be responsible for broader skills related to digital literacy such as resilience in learning, getting over technology fear, and problem-solving through integrated instruction that incorporates these skills into adult education lessons.
- Specific skills mentioned as fundamental include:
  - Typing skills
  - Using devices
  - Navigating websites
  - Using email and scheduling software
  - Using video conferring platforms to communicate
  - Microsoft Office - Word, Excel, PowerPoint
  - Using functions on landline telephones
  - Using learning managements systems such as Canvas, Blackboard, or Moodle
  - Digital applications
  - YouTube
  - Organizing and sharing photos
  - Using online word processors and spreadsheets
  - Using technology in daily life
  - Computer basics (computer terminology; including parts of the computer, mousing, typing/keyboarding skills)
  - Email (personal & professional)
  - eLearning Platforms such as Google Classroom, Canvas, or other LMS (how to complete and submit assignments, participate in an online classroom)

- o Video Conferencing Tools (Zoom, etc)
- o Google Suite
- o Microsoft Office Suite/Office 365
- o Information & media literacy - evaluating sources of information
- o Social Media use and safety
- o Job-seeking skills (online job sites, how to complete online applications, resumes, cover letters)
- o Cyber safety (how to stay safe and protect PII online)
- Participants come to programs with a wide range of digital skills. Providers should be responsible for teaching basic level skills to all participants who lack them, with increasing levels dependent on the proficiency needed to achieve participants' goals in the program. For example, a participant enrolled in an IET program may need specific skills required for entry level positions in that particular workforce sector.
- The fifteen components of the Northstar Digital Literacy program are comprehensive and a great place to start, but there is no additional support or recognition for this instruction for adult education programs.

5. Federal Investments in Digital Literacy: Share what support from the federal government is needed to advance digital literacy attainment efforts (a-c):

NASDAE Comment (a-c): *Most NASDAE respondents accessed one-time funds to support digital needs of learners during the pandemic and all respondents feel that more funds are needed to support digital learning from infrastructure and hardware to training for faculty, increased IT staffing, and cross-agency collaboration. Additional resources suggested including codifying digital skills into the WIOA performance accountability system through Educational Functioning Levels that can capture student learning gains and contribute to program performance, availability of contextualized materials, adoption of a range of modalities for instruction, and technical assistance on how to integrate digital skills across the spectrum of adult education and workforce programming.*

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

Voices from the States:

- WIOA Title II
- DRAW Project, https://lincs.ed.gov/state-resources/federal-initiatives/draw
- Using funds from a one-time supplemental award for additional funding was given to programs PY 20-21; must utilize it to increase the number of devices at the program and/or to implement a lending program for students to use outside of class time.
- Maine was able to access CRF funds for adult education providers to access devices and hotspots and other tech needs/training for their staff and learners.
- Adult Education funds, earmarked specifically for digital literacy enhancement within adult education programs; WIOA Youth Funds with emphasis for Adult Education;

Federal dollars provided to libraries across the nation to also provide digital literacy growth for not only the librarians, but those who frequent these establishments.

- Federal funding to support digital literacy include Workforce Innovation and Opportunity Act (WIOA), Coronavirus Aid, Relief, and Economic Security (CARES) Act and Coronavirus Response and Relief Supplemental appropriations Act (CRRSA) funds.

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

Voices from the States:

- **Yes!**
- Yes. Perhaps without so many stipulations attached, regardless of whether the regulations are from federal or state funding sources.
- Yes, fund national level projects that include cross-agency work among state entities related to digital skills and equity work. The recent NGA WIN training in which Pennsylvania participated had several successful outcomes because several state agencies worked together.
- Major funding increases are needed to be able to increase the amount of full-time adult education teachers. With more skills needing to be taught, states and local governments need to be able to fund more time for instructional planning and delivery. This will also increase stability at programs which in-turn increases student learning. Additionally, investments in infrastructure for rural areas to bring reliable access to everyone in the state is needed. Cultural considerations need to be made for native lands and alternatives to digging/disrupting land must be sought to bring connectivity to all.
- Additional funding is always needed, especially if standard learning outcomes are created and if these skills will become performance measures. However, in the absence of additional funding codifying the use of existing funding streams such as WIOA, Titles I & II, TANF, SNAP, etc to support digital skill building is needed in the Infrastructure/Digital Equity Act.
- Yes. Existing statutes for workforce development and education have not kept pace with the need for digital upskilling and reskilling. While we have endeavored to plan with sustainability in mind, it becomes increasingly difficult to maintain and grow services without sufficient funding.
- Yes! We need money for more devices, replacement and maintenance plans, and the ability to supply IT support to staff and students.

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

Voices from the States:

- Funding, as well as expanded ability to deliver professional development to those tasked with teaching digital literacy. Currently, WIOA Title II specifies professional development as non-instructional costs and restricts the amount of funds available for professional development within the five percent administration cap.

- Making learners and the public more aware of what is currently available to them to bridge the digital literacy gap. Offering access through classes and awareness campaigns to obtain technology devices or internet service.
- Assuming everyone had access to devices and internet, money for more student support and coaching. Having more resources for people to get real-time help, maybe a technical assistance hotline for the public.
- Educators need digital literacy to count as an performance gain for federal reporting so that they can justify spending more class time on digital literacy specifically.
- Hardware exchange programs, integrating digital skills into the high school equivalency process, adoption of common digital skills standards that highlight foundational industry-wide skills; digital literacy curricula that address resiliency (now up to instructor).
- Yes, but specifically earmarked for adult education digital literacy programs.
- Contextualized materials that are low cost or open educational resources; Assessment tools to allow for skill gain capture and reporting; standard learning objectives by NRS level; Instructional training in different modalities such as hybrid and HyFlex; Building strategic partnerships; TA in conducting formal community needs assessments.
- Technical assistance and resources for contextualized learning of digital literacy in IET and IELCE programs would be valuable to build digital resilience capacity. Success in all career pathways requires digital literacy skills, so related technical assistance and resources would enhance the delivery services and build digital resilience capacity.
- More funds to allow full-time professionals to support student and instructors' technology use and provide technical assistance.
- Consideration of an MSG based on digital literacy advancement.

5. Federal Investments in Digital Literacy: Share what support from the federal government is needed to advance digital literacy attainment efforts (d-e):

> **NASDAE Comment (5 d-e):** *NASDAE respondents are doing what they can with any local and one-time dollars, but help is needed to braid federal funding effectively and sustainably. Members shared concerns that federal infrastructure funds are flowing to states through the Dept. of Commerce and education providers are struggling to find a way to access those planning conversations to see where funding and programmatic alignment is possible. There is widespread recognition of the unmet potential within WIOA for co-enrollment and leveraging funding across titles, but the level of partnership varies by state and locality.*

(d) How are WIOA grantees/subgrantees leveraging funding outside of WIOA, such as the Affordable Connectivity Program and/or digital equity funding under the Bipartisan Infrastructure Law, to address digital inclusion and equity challenges with federal funding?

Voices from the States:

- Funds are being leveraged by partnering with other entities to share other means of access to digital opportunities and inclusion. When students are able to gain access to technology equipment to increase their digital skills and educational process, everybody vested or involved wins.
- Governor's Discretionary Funds.

- Funds from the Infrastructure, especially Digital Equity Act, funds are coming to states through the Department of Commerce, which has not so far typically been involved in funding that includes instruction on skill building, or in education and training programs which usually receive funding through Departments of Education and Labor. States are struggling to figure out how to collaborate with their Commerce departments to ensure that current federal investments at the state level, and the expertise that comes along with those funding streams, can be leveraged as the Infrastructure funds flow into the states. Programs also have to take supplanting into consideration as they learn how to braid funding from multiple federal sources.
- In addition to Coronavirus relief funds mentioned previously, WIOA grantees leverage funds with state funding for adult education and for training aligned with career pathway programs (credit and non-credit) at community colleges.
- Most providers are not leveraging these resources yet. There needs to be more personal outreach and knowledgeable support like Digital Navigators to assist programs and students to access opportunities like the Affordable Connectivity Program.

(e) How can federally-funded workforce and education training programs work together to ensure that participants (adult and youth) receive needed training in foundational and occupation-specific digital literacy skills?

Voices from the States:

- Often training is done on a small scale. However, making the training more inclusive in the service process in combination with completion of certain measures followed with an incentive could perhaps equip more learners with the digital literacy skills they need for success.
- Place WIOA Youth Program under the umbrella of Adult Education. Workforce may partner with the Adult Education program to require participants to complete a work-ready program which includes Digital Literacy, Employability Skills, Career Awareness, and Financial Literacy. Exceptions should be made based on educational skill level and work history of the participant. Adult education federal funds to supplement teachers' pay to teach digital literacy classes along with the adult education classes. WIN Job Centers should be required to not only teach digital literacy classes, but be held accountable for whether the participants learned anything.
- It is necessary for all stakeholders to work together to identify in-demand digital literacy skills and other relevant skills for the local labor market. Partnerships between employers with education, training, labor, and community-based organizations to address the local skill needs of a particular industry will help those planning to enter the workforce to prepare for jobs that require skills training. This will also assist employers in finding skilled workers. Partnerships with employers will ensure that individuals are developing the specific skill sets and attaining credentials that local employers need. These partnerships are critical because if they don't exist, providers can only guess what skills employers need.
- They could engage in targeted planning and/or policy reviews with the goal of facilitating, not just referrals, but co-enrollment and support for participants who need training in foundational and occupation-specific digital literacy skills.

- More needs to be done to enhance a common understanding among workforce partners and employers of what are fundamental digital skills - and then work to identify ways to meet the needs and recognize growth and success.

6. Digital Literacy and K-12 Public Education System: Please share successful strategies, key challenges, and lessons learned in addressing digital literacy for K-12 youth:

(c) How should the Department of Education better encourage digital skills education in the K-12, community colleges, and adult education settings?

NASDAE Comment: *NASDAE members again expressed a desire to have digital literacy added as a performance metric for adult education students. Some states have come up with state standards to this effect. Some suggest a K-16 approach that would lay out digital skills standards from a long-term learning pathway perspective. The Department could provide more guidance on the allowability of funds for digital skills and literacy instruction and could work to foster a common understanding among workforce system stakeholders as to what fundamental skills are and how to incorporate them into education and training programs.*

Voices from the States:

- The Department of Education can first provide technology/internet access to individuals who make an attempt to educate themselves. Usually, certain criteria, strict stipulations or harsh penalties deter individuals from wanting to utilize devices or trying to access them. If encouraging individuals to digital education skills is more inclusive and the necessary tools and equipment are [available] at the onset of training, learners will probably be more adept to increase their digital skills.
- The Pennsylvania Dept. of Education created Digital Literacy Teacher Competencies to support teachers in incorporating digital skills development as part of academic instruction.
- Provide resources to support digital literacy skills integration in academic content.
- Allow digital literacy to be counted as a performance outcome for adult learners.
- The digital skills necessary to be considered digitally literate today are to be able to communicate through digital means, to use technology to access information, and to use technology to make tasks easier and enrich the user's life. In the immediate future, the skills necessary to be considered digitally literate will be the same as they are now with the addition of the growing need to adapt to constantly changing technology and to be mentally flexible enough to learn new systems. In the semi-distant future, there may be less of a focus on digital skills education as an area of need because it will become a matter of course and more intuitive as time goes on. The pre-digital way of doing things will have disappeared completely. Technology will continue to advance, but the steep learning curve from pre-technology to technology will have already been surmounted by every person. The digital literacy of the population should continue to advance with each new technology as a matter of course.
- Provide money specifically for digital skills training and connect industry to training programs. For example, if industries wanting to hire office personnel, they should require an IC3 certification then adult education and workforce classes would be filled

by workers trying to get certified in order to get jobs. Right now, a high school diploma or less qualifies most for any job out there. Get back to requiring a diploma and certified credentials for jobs in Mississippi.

- Encourage alignment of skills K-16. Having standard learning objectives beginning with kindergarten to ensure all students are leaving K-12 with the skills needed to be career and college ready.
- The department could provide consistent, intentional guidance on the relevance and allowability of digital skills education in the context of other basic skills instruction and federal funding.
- More needs to be done to enhance a common understanding among workforce partners and employers of what fundamental digital skills are and then work to identify ways to meet the needs and recognize growth and success.