

A woman with short dark hair, wearing glasses and a black blazer, is leaning over a desk in a computer lab. She is looking at a man in a suit who is sitting at a computer. The background shows other people working at computers in a dimly lit room with warm lighting. The LSC logo is in the top right corner.

LSC

Digital Skilling: Paving a Path to a Prosperous Future



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For more than 40 years, LISC has worked to connect local partners with the capital and technical know-how to help build resilient and inclusive communities of opportunity across America – great places to live, work, visit, do business and raise families.

These efforts increasingly operate in a digitized environment where a community member's active participation in the economic, social, and cultural aspects of modern life requires access to broadband and the digital skills to use it to full advantage. Technology is changing how we work – but more importantly, who gets to work.

LISC's Income & Wealth Building program aims to create healthy, sustainable communities by equipping residents with the skills necessary to attain living wage jobs. Digital skills are integral to the success of today's workforce. The rapid digitization of our world in recent years means that more than ever, digital skills are necessary to fulfill the needs of today's labor market.

This paper highlights the importance of digital skilling and uses the example of LISC's integrated service delivery model to provide a tested, real-world approach that can serve as a best practice.

What's At Stake

Digital skills—the ability to use technology to complete tasks in various settings—are of vital importance in making connections to and achieving success in education, the workplace, and the wider social society. The shift toward a more digitalized work environment has transformed the skill set necessary to secure, retain, and advance in employment. The accelerated growth and widespread adoption of digital tools during the COVID-19 pandemic have made it imperative for organizations and policy makers to prioritize the strategies aimed at bridging the digital access and digital skills divide.

The unfortunate reality is that individuals living in divested or underserved communities are denied access to the numerous opportunities and resources made possible by broadband technology due to digital inequities rooted in poverty, lack of affordable and reliable broadband access, and a lack of digital proficiency. This divide creates an increasingly negative drag on the outcomes and upward mobility of people living in these communities, compounding existing economic disparities.

Digital skilling enables job-seekers to take advantage of further training as well as flexible or remote work opportunities, which can be especially beneficial for those individuals who face transportation or childcare barriers.

Historic investment in digital equity through legislation like the Digital Equity Act of 2021 is encouraging. LISC looks forward to supporting efforts to sustain this investment well into the future. More specifically, LISC is working with its partners across the nation to highlight the importance of equitable distribution of these funds in a manner that reaches the historically disconnected urban and rural communities where LISC works. This is critical to increase access to digital skills training and to promote greater integration between workforce development and digital inclusion.



What is a Digital Skill?

Some digital skills are foundational skills such as email, simple spreadsheets, data entry, or timecard software.

Others are industry-specific skills, such as bookkeepers using QuickBooks, manufacturing workers using AutoCAD, or home health aides using electronic medical records.



Types of Digital Skilling

Digital skills fall into two broad categories: **Foundational** (non-specialized) and **Advanced** (specialized, job specific). Both foundational and advanced skills are best obtained in an instructional setting that includes real-life examples of how these skills can be applied.

Foundational skills are those generally covered in basic digital literacy instruction and can be delivered virtually or, more effectively, in small classroom or one-on-one coaching settings which allow for individual assistance. Foundational skills can be used in many areas of a community member's life. They provide a baseline of technical skills for the use of digital devices and critical thinking skills for safely using the internet to search for and evaluate information to solve problems and achieve their goals. Importantly, foundational skills can be transferred across jobs and can prepare workers for potential advancement from entry level positions or occupational changes. Foundational skills such as email, simple spreadsheets, data entry, or timecard software are non-specialized and can be useful in a variety of industries.

Advanced skills are generally the focus of employer-directed learning, and are required for jobs that are mostly digital, such as computer programming, software development, IT support, and computer-aided design operation.

Why Teach Digital Skills?

The need to address the digital skills divide is urgent. Residents of the underserved communities and communities facing historic barriers to success including Black, Indigenous, Persons of Color (BIPOC) individuals, are being increasingly excluded from living-wage job opportunities, the ability to access online financial tools, emergency resources like unemployment compensation, and more broadly, full civic and social participation in today's digital world. Recent research underscores this urgency to act with purpose:

- 92% of jobs in the U.S. require digital skills at some level, but almost one-third of workers lack these critical skills.
 - The number of workers lacking digital skills includes the 13% of overall workers who have no digital skills and another 18% who have limited skills. An additional 35% have achieved a baseline level of proficiency in their digital skills, and the final 33% of workers have advanced skills.¹
- 31% of all U.S. workers lack foundational digital skills, including 41% without high school diplomas and 17% with high school but without a college degree.²
 - Obtaining a high school diploma equivalency, vocational certificate or associates degree is becoming increasingly difficult as these programs continue to move to online platforms.
- 84% of organizations currently use social media to recruit employees with another 9% planning to shift to social media postings. 79% of job seekers use social media to conduct job searches³, but 21% individuals with limited digital skills stated it would not be easy to highlight their employment skills using a personal website or social media profile⁴.

Digital Skill Categories

Foundational

1. **Device Use & Internet Safety**
2. **Email**
3. **Word Processing**
4. **Spread Sheets and Calendars**
5. **Communication via Virtual Platforms**
6. **Online Searches**
7. **Evaluating Information**
8. **Problem Solving**

Advanced

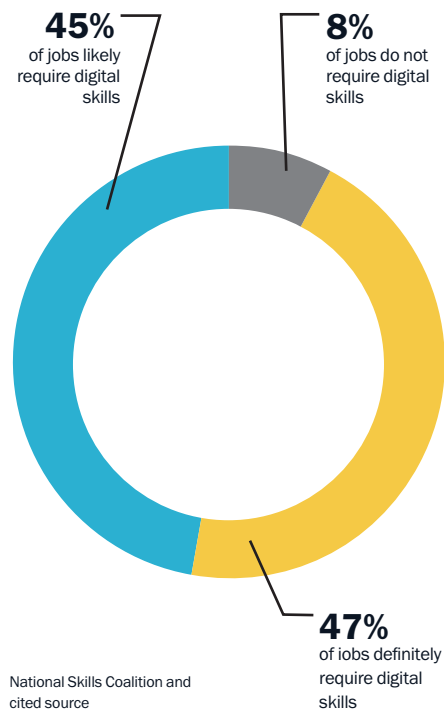
1. **Search Engine Optimization**
2. **User Experience Design**
3. **Web Programming**
4. **Web Development**
5. **Data Analysis and Visualization**
6. **Digital Marketing**
7. **Search Engine Marketing**
8. **Information Security**

US Workers' Digital Skills Today

The demand for workers with digital skills is robust across all industries. Small businesses are just as likely as their larger counterparts to seek workers with technology skills despite the fact that they often lack the financial resources and expertise to provide inhouse training.

The current situation is not sustainable and is detrimental to both employers seeking workers with digital skills as well as the ability of workers to earn a living wage. As discussed above, a substantial portion of the workforce lacks the digital skills to seek and secure new employment opportunities or effectively perform in their current roles. What is required is a holistic solution that prioritizes new approaches to skills development within the existing workforce and untapped talent pools.⁵

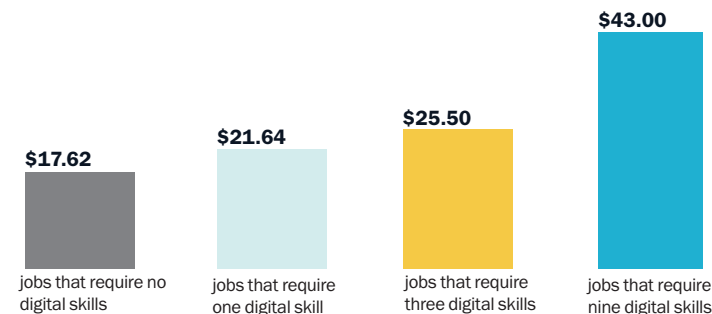
The stark reality is that elevating individuals toward sustainable, well-paying employment cannot be divorced from the digital skilling divide. The return on resources invested in both individuals and society is profound and far-reaching.



Digital Skills Improve Labor Participation

People who lack foundational digital skills have a lower rate of labor force participation.⁶ Furthermore, by gaining digital skills, workers can significantly lower their risk of being replaced by automation by as much as 59%. Digital skills often complement uniquely human abilities like communication, critical thinking and interpersonal skills.⁷ The combination of these human skills will be elevated or enhanced, but not replaced by automation or artificial intelligence in the future. The increasing sophistication of artificial intelligence further highlights the importance of teaching contextualized digital skills within career training and programs like LISC's Bridges to Career Opportunities so the workforce is equipped with irreplaceable skills.

JOB'S THAT REQUIRE DIGITAL SKILLS PAY MORE MEDIAN HOURLY WAGE



Source NSC/Federal Reserve Bank of Atlanta analysis of 2021 job postings full report: Closing the Digital Divide.

Digital Skills and Broadband Access Improve Earnings

Ensuring home broadband access is an important element in optimizing returns on digital skilling efforts. Employment rates improve 10-12% and household incomes increase \$2,200 or more after obtaining home broadband service, with the greatest impacts realized by families living at 150% of the federal poverty level.⁸ Furthermore, workers that qualify for jobs requiring even one digital skill can earn an average of 23% (equal on average to \$8,000) more per year than those working in jobs that require no digital skills.⁹

TRAINING CENTER

- * JOB TRAINING PROGRAM
- * COMPUTER TRAINING

Gaining at least three digital skills can qualify a worker for a 45% pay increase.

Increased Earnings Through Digital Skills Contribute to the Tax Base

Digital skills have the power to boost income for workers and generate revenue for states and localities. For example, workers that move from jobs requiring no digital skills to jobs requiring at least three can increase their pay by an average of 45%.¹⁰ It follows that increased pay among the workforce leads to increased tax revenue for local communities.

Depending on the household size and composition, increased earnings would generate between \$1,363 and \$2,879 in additional tax revenue to support local investments that make communities more sustainable.¹¹





A Promising Solution to the Digital Divide: LISC's Approach

The opportunity to acquire digital skills must be made accessible to everyone. Equal access to digital skills ensures the economic well-being of communities, bolsters the competitiveness of the business sector, and unlocks the potential for fostering a more prosperous, socially-involved, and healthier life for marginalized and economically disadvantaged families and individuals. The wide-ranging influence and relevance of these skills, coupled with the demonstrated effectiveness of hands-on, task-oriented learning models, strongly support the approach embraced by LISC, including its Financial Opportunity Center® (FOC) and Bridges to Career Opportunities programming being implemented by community-based partners across the United States.

FOC Model

LISC's Financial Opportunity Center® partners connect families living on low-to-moderate incomes with the financial and labor market mainstream through employment and career services, financial coaching, and access to safe, affordable financial products that build credit, savings, and assets. A defining characteristic of the FOC model is that it centers neighborhood residents' personal goals through one-on-one coaching. It focuses on integrating the delivery of employment services, financial coaching, and other income stabilizing and success-boosting supports. This integrated service delivery approach works better as compared to programs that focus on employment services alone. Participants who received integrated or "bundled" services were 50% more likely to obtain jobs and twice as likely to have retained those jobs one year later.¹²

LISC's Bridges to Career Opportunities (Bridges) programs are embedded in community-based organizations that operate LISC's Financial Opportunity Center® model. Bridges combines contextualized math and literacy training designed to help participants succeed in skills training and credentialing with a comprehensive set of complementary services including access to income supports and financial coaching to help manage expenses during training and set long-term goals for stabilizing finances and building assets as they advance in their new careers.

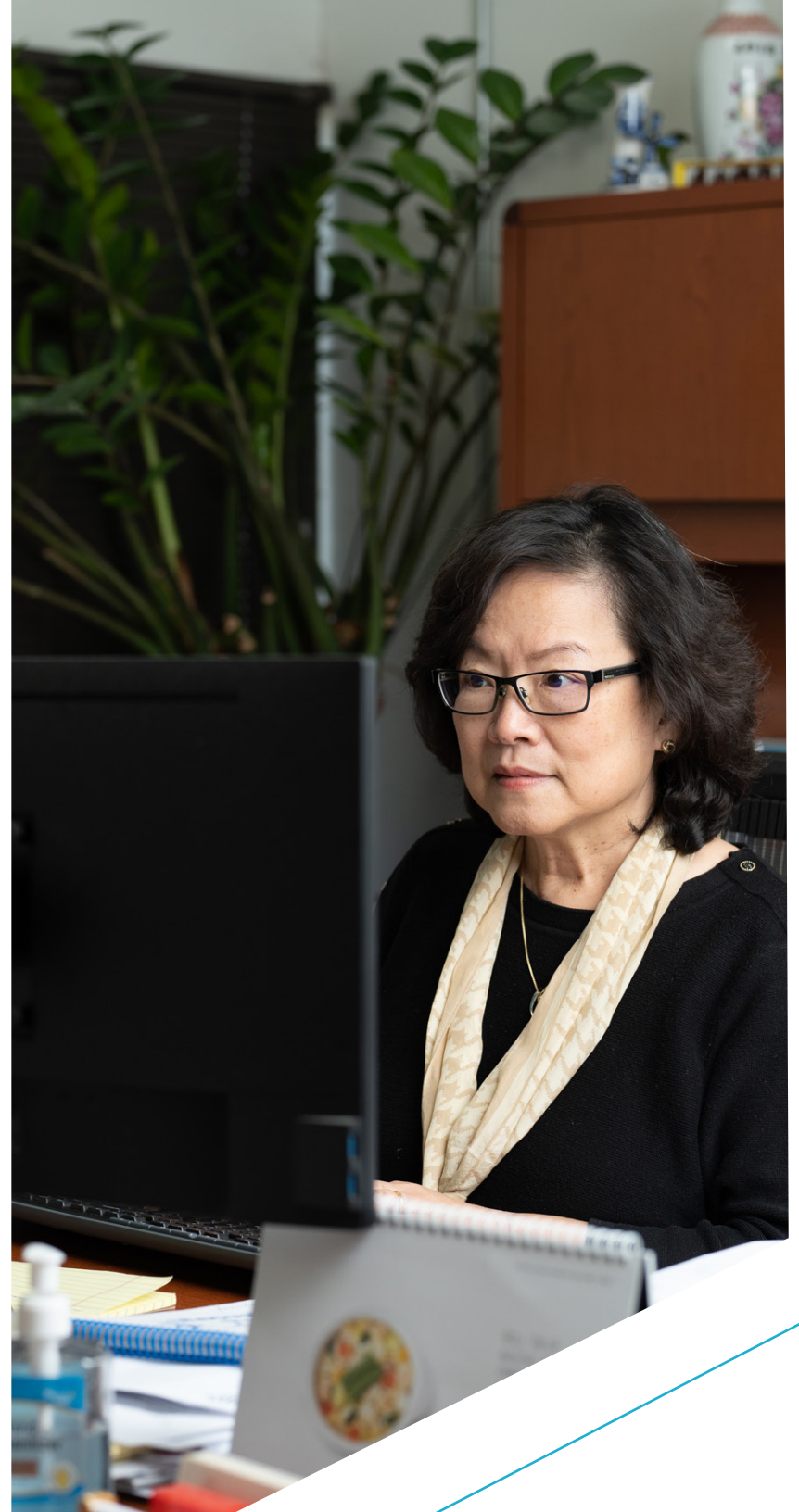
LISC has supported integrating digital skilling across FOC programming in its network of over 120 partners for more than a decade. Leveraging its partnership with global professional services firms such as Accenture's online Skills to Succeed (S2S) Learning Exchange, Northstar, and other internally-developed trainings, FOC partners receive customized digital literacy and Bridges curricula specific to in-demand careers, including Information Technology (IT), and Biotechnology.

The urgent imperative for digital skilling and broadband access intensified with the onset of the COVID-19 pandemic in early 2020. The abrupt shifts to online learning, access to remote services, and rapid adoption of remote work made the demand for comprehensive digital skilling learning apparent. These societal shifts occurred in tandem with accelerating trends in automation, artificial intelligence, and digitization.

Early investment from Citizens Bank and Citizens Charitable Foundation catalyzed LISC's expanded efforts to equip community partners and the residents they serve with devices, connection to at-home broadband, and essential digital skills. Continued investment from Citizens and partnership from leading supporters of digital inclusion like AT&T and Comcast have been critical to expanding LISC's work to support digital coaching, digital navigation, digital skilling, and device access within the FOC network and other LISC community partners.

1. Contextualizing Digital Skills for Better Outcomes

LISC's FOC model of contextualized coaching and wrap-around services builds confidence and facilitates retention of digital skills by linking them to practical applications for job-searching, personal finance management, and workplace success. Foundational digital skills are introduced through basic digital instruction that connects community members to social services, web-based budgeting tools, online banking, and expanded online retail, communication, health care and entertainment resources. These efforts lay the groundwork for community residents to pursue additional advanced or industry-specific digital skills, building on the knowledge and confidence gained through digital literacy workshops and one-on-one digital coaching.



2. Success Through Digital Job Skilling and Experiential Career Training

The marriage of digital skilling and experiential learning in occupation-specific workforce training programs is another best practice in LISC's Financial Opportunity Center® and Bridges to Career Opportunities work. Through integration of industry-specific digital skills and technology, this contextualized training introduces occupation-specific skills and tools that **facilitate improvements in participating community member's foundational and advanced digital skills.**

Best practices from LISC community partners in incorporating digital inclusion and skilling include:

- **Integrate digital inclusion and skilling as basic tenets of programming and service delivery.** This comprehensive approach to digital inclusion and skilling will upskill staff, improve outcomes, and position participating residents for continued progress. Assessment of device access, home internet connection, and digital skill level conducted early in service delivery as a foundation for all future services.
- **Use technology to broaden impact when engaging diverse populations.** For example, while several digital training curricula and resources are available online in Spanish as well as in English, emerging translation technology can expand services into communities where other languages are spoken.
- **Explore multiple digital training platforms to ensure the best fit for a particular audience.** Various respected digital training platforms, including Google Classroom, The Achievery, NorthStar and Accenture Learning Exchange, enable FOC partners and other community-based organizations to choose the platforms and menu of specific digital skilling curriculum topics that meet the learning needs of their community members. For example, NorthStar provides free assessments for foundational digital skilling while Accenture Learning Exchange provides industry-specific and advanced digital skill training. The Achievery is tailored to K-12 and parents to ensure online safety and awareness.
- **Enhance, augment, and reinforce group-based digital skilling classes by incorporating one-on-one digital coaching.** Digital coaching amplifies an organization's efforts to help residents reach their

individualized short-term and long-term employment and financial goals. Often, people require additional support or a 'safer' space to feel comfortable asking questions while navigating unfamiliar technology. The trust and connection built within a coaching relationship can provide that comfort.

- **Contextualized digital skilling within occupational-specific training to help bridge the gap between general education and industry-specific demands.** This approach makes digital skilling more relevant and immediately applicable, enhancing both the employability and job performance of those engaged in the training. For example, in healthcare, digital skilling might focus on electronic health records (EHR) management and telemedicine tools.





Conclusion

There is an urgent need to engage individuals who are unemployed, underemployed, and marginalized through the implementation of programs that combine digital skilling and workforce training in both in-person and virtual formats. This is crucial to prepare these individuals for success in today and tomorrow’s economic and social landscape. LISC’s integrated service delivery model provides a tested, real-world approach that can be adapted as a best practice. Documenting shifts in participating community members’ perceptions and attitudes toward digital skilling, along with tracking improvements in their digital skills attainment, can further showcase the importance of embedding digital skilling in integrated services.

Creative partnerships between funders, service providers, and employers are needed to deliver the range of educational and training resources necessary to overcome digital barriers to economic success.

Ecosystem for Digital Resilience

In which stakeholders invest in technology access, digital and lifelong learning skills, and pathways to digital resilience **and also ...**

Education & Service Providers

Expand access to digital skills development through new delivery models

Leverage technology to improve service outcomes

Government and Philanthropy

Invest in research, innovation, and capacity building for digital inclusion and skills development

Employers

Create opportunities for their employees and communities to build digital skills. Develop partnerships and leverage technology to diversify and grow talent

Tech Developers

Partner to create products that meet the needs of all learner-workers



Image Source: Digital U.S. Coalition¹³

Fortunately, there are resources becoming available to assist this expansion. The federal Digital Equity Act¹⁴ (part of the Infrastructure Investment and Jobs Act of 2021) is providing \$2.75 billion in funding for state and local efforts to help individuals build digital skills as well as obtain access to broadband and devices. Targeted populations singled out for assistance to close equity gaps in digital access and skills include many of the individuals that comprise some of the diverse client base for LISC’s Income and Wealth Building program: people of color, low-income individuals, rural residents, people with disabilities, and veterans. Public-private partnerships have a unique opportunity to build on the momentum of this trailblazing legislation by investing the additional resources needed to grow a best practice model for embedding digital inclusion and skilling in employment and financial health services.

Endnotes

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- 2 OECD Program for International Assessment of Adult Competencies
- 3 <https://www.apollotechnical.com/social-media-recruiting-statistics>
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- 6 Urban Institute “Foundational Digital Skills for Career Advancement” https://www.urban.org/sites/default/files/publication/100843/foundational_digital_skills_for_career_progress_3.pdf
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- 9 Benton Foundation “The Digital Skills Divide” <https://www.benton.org/blog/digital-skill-divide#:~:text=People%20who%20qualify%20for%20jobs,revenue%20generated%20by%20each%20worker>
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- 12 First Steps on the Road To Financial Well-Being, 16024-first-steps_r5-report-web.pdf (lisc.org)
- 13 Digital U.S. “Building a Digitally Resilient Workforce Creating On-Ramps to Opportunity” <https://digitalus.org/wp-content/uploads/2020/06/DigitalUS-Report-pages-20200602.pdf>
- 14 <https://www.digitalequityact.org/>