



Innovations to **Boost Equitable Digital Skills Access** and Acquisition in Illinois

November 4, 2020





- Phone lines will be muted for better sound quality
- Please use question box to ask questions





Poll Question





Two-Part Webinar Series on Digital Divide

Digital Infrastructure, Access & Skills: Analysis of Digital Divide Inequities

September 23, 2020

- Digital Infrastructure, Access & Skills: Analysis of Digital Divide Inequities Slides
- Digital Infrastructure, Access & Skills: Analysis of Digital Divide Inequities Companion Resources
- Webinar Video: https://youtu.be/ZTHDHYl9fMY



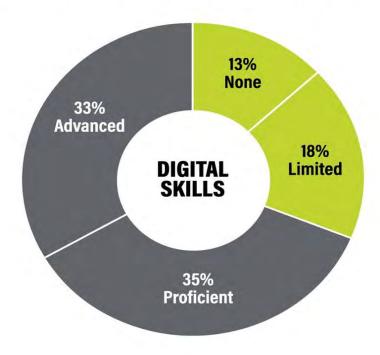


Poll Question





Nearly one-third of America's workers lack digital skills



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



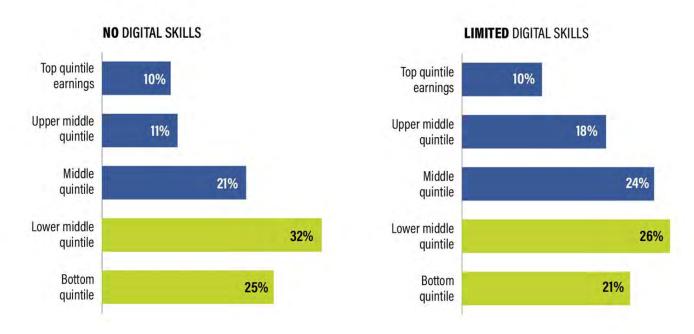


Poll Question





Roughly half of workers with limited or no digital skills have low earnings



Numbers may not sum to 100 due to rounding. Currently employed US workers ages 16-64. Source: OECD Survey of Adult Skills (PIAAC) 2012-14.



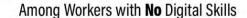


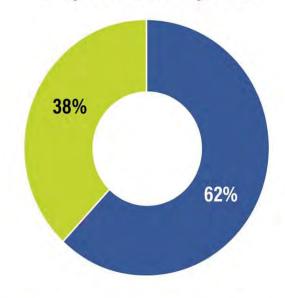
Poll Question





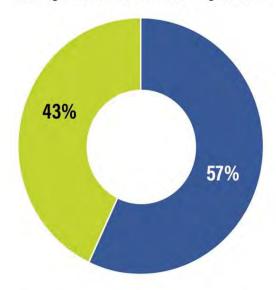
Many workers who lack digital literacy have jobs that require substantive computer skills





Moderate or complex computer skills needed for current job

Among Workers with **Limited** Digital Skills



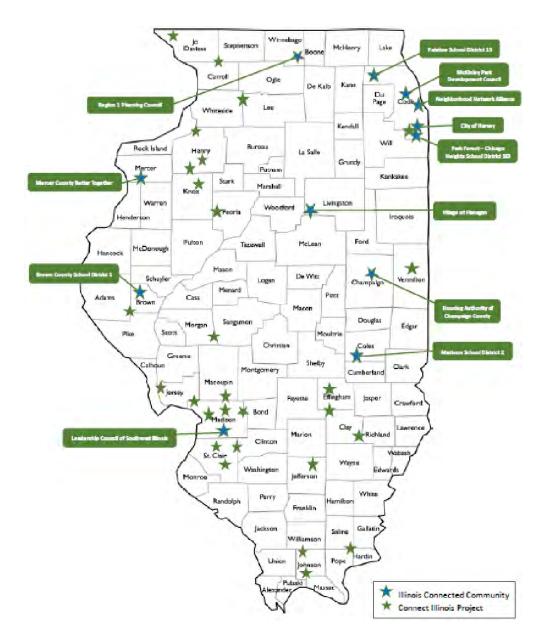
Straightforward computer skills needed for current job

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



ILLINOIS CONNECTED COMMUNITIES





- Partnership among the Illinois Office of Broadband, the Benton Institute for Broadband & Society, and local philanthropy.
 Designed to engage a first-year cohort of communities through best practice curriculum and expert consultation.
- The initial cohort includes four school districts, two communitybased organizations, two local governments, two county-level organizations, and two economic development groups:
 - Brown County School District 1
 - City of Harvey
 - Housing Authority of Champaign County
 - Leadership Council Southwestern Illinois
 - Mattoon School District 2
 - McKinley Park Development Council

- Mercer County Better Together
- Neighborhood Network Alliance
- Palatine School District 15
- Park Forest-Chicago Heights School District 163
- Region 1 Planning Council
- Village of Flanagan
- Each Illinois Connected Community will have completed a community-driven, broadband strategic plan that articulates the community's broadband vision and identifies an action plan for progress toward improved broadband access in the areas of community and economic development, education, civic engagement, healthcare, agriculture, and more.



Digital Divide Recommendations

States need support to develop and implement quality programs that embed digital literacy.

Define occupational digital literacy and embed the definition in relevant legislation

Evaluate the current landscape and increase funding for digital literacy as a core competency States need support to develop and implement quality programs that embed digital literacy.

Build capacity with Digital Literacy Upskilling Grants

Analyze program data to determine best practices

Small and mid-sized employers need support to rapidly upskill their new and incumbent workforces.

Incentivize private investment in upskilling incumbent workers

Allocate rapid response dollars to assist disconnected workers

Small businesses have limited training capacity while external training may not respond to local business need.

Empower innovation through industry partnerships





Today's Panelists

Kimberly Lunt, Digital Literacy Coordinator, Waukegan Public Library

Robert Edwards, Decatur Public Library

Matt Weis, Chief Program Officer, National Able Network

Richard Bush, Dean, Blackhawk Community College

Edwin Braun, New Braunfels ISD

Seth Brozio, Richland Community College, Highway Construction Career Training Program

Nick Gorenz, Richland Community College, Workforce Development

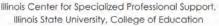
Moises Bernal Puente, Central States SER and Illinois Digital Learning Lab





Kim Lunt Waukegan Public Library







WAUKEGAN PUBLIC LIBRARY



Digital Literacy Using Zoom

• All learners who need assistance are given a Zoom orientation







Northstar Digital Literacy

- Nationally recognized for Digital Literacy
 - WPL is the only Northstar site in Lake County
- Northstar Online Learning Accounts (NSOL)
- Online practice and proctored digital literacy assessments
 - Earn electronic badges
 - Earn certificates
- Certificates are recognized by employers and can be added to your resume.
 - Employers can be confident that the certificates show competence in the certified area of technology.
- Daily technology life skills are improved by mastering Northstar topics.





Northstar Topics

Essential Computer Skills	Essential Software Skills	Using Technology in Daily Life
 Basic Computer Skills Internet Basics Using Email Windows 10 Mac OS 	Microsoft WordMicrosoft ExcelMicrosoft PowerPoint	 Social Media Information Literacy Career Search Skills Your Digital Footprint







Northstar Certificate Earners











Resources for Northstar Preparation at the Waukegan Public Library

- 5-6 week classes on one Northstar topic
- One-on-one computer help
- Drop-in Labs
- Northstar Online Learning (NSOL) Accounts
- External-resources found at
 - https://www.digitalliteracyassessment.org/external-resources
 - https://edu.gcfglobal.org/en/
 - https://digitallearn.org/





WPL Classes and Workshops in English and Spanish

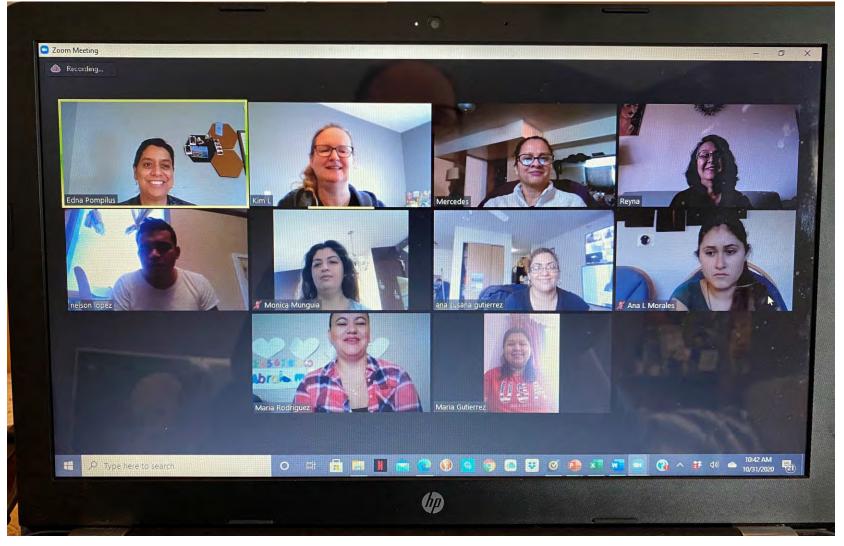
- Internet
 - Navigation
 - Search
 - Online Forms
 - Email
 - Safety
- Internet for WPS60 Parents
 - All of the above with an emphasis on WPS60 online tools
 - Infinite Campus
 - Google Classroom
 - District website navigation















Classes and Workshops

- Microsoft Word
 - Setting up, creating and editing a document
 - Formatting and aligning text
 - Copying and moving text
 - Inserting non-text items to a document
- Microsoft Excel
 - Entering and analyzing data
 - Formatting and organizing a workbook
 - Formulas and charts
 - Saving and printing







Drop-in Labs and Individual Appointments through Zoom

- Computer help offered in English and Spanish
 - Drop in for questions and guidance on computer topics
 - Lab assistants provide one-on-one help and set up with online resources
 - Individual sessions
- Job Readiness help offered in English
 - Drop in for questions and guidance on resumes, job search, applications, interviewing
 - Individual appointments













Typingclub.com

- Self-paced online typing program
- Individualized lesson plans
 - Accessibility options







Laptop Refurbishing and Raffles

- Donations from organizations
- Volunteers refurbish
- Raffle for successful learners in our programs







For More Information

• Contact Jennyfer Cordova at 847-775-2547 or jcordova@waukeganpl.info for registration

 Contact Kim Lunt at 847-775-2562 or kimberlylunt@waukeganpl.info for program information



















Matt Weis National Able Network





National Able Network

- Established in 1977, National Able is a non-profit organization focused on workforce development issues and programming
- Our programs are designed to assist unemployed and/or underemployed adult job seekers from all backgrounds
- Each year, National Able Network serves more than 75,000 job seekers from across the Midwest







Programming Overview

- WIOA American Job Center Operator and Service Provider in multiple geographies
- SCSEP grantee across multiple States
- Cutting edge IT-focused vocational training and apprenticeship program – IT Career Lab
- Veteran specific programming
- SNAP E&T service provider and Intermediary
- Chicagoland area regional Trade Adjustment Assistance provider





COVID Adaptations

- Transitioned to virtual service delivery for all programs in March/April
- DocuSign usage
- Online live and pre-recorded program orientations
- Virtual instruction both vocational training and job readiness
- Staff remote access had made earlier investments
 - Virtual office phones
 - Laptops other necessary hardware
 - Office 365 and internal training opportunities
- Secure digital file storage
- Transition to digital assessments and testing





Best Practice Examples



SCSEP

Senior Community Service Employment Program





IT Career Lab

- Vocational IT classroom training program focusing on Microsoft and Cisco certifications
- Classes are comprised entirely of unemployed/underemployed individuals
- Participants are issued a new laptop which they get to keep upon successful program completion
- USDOL registered apprenticeship program





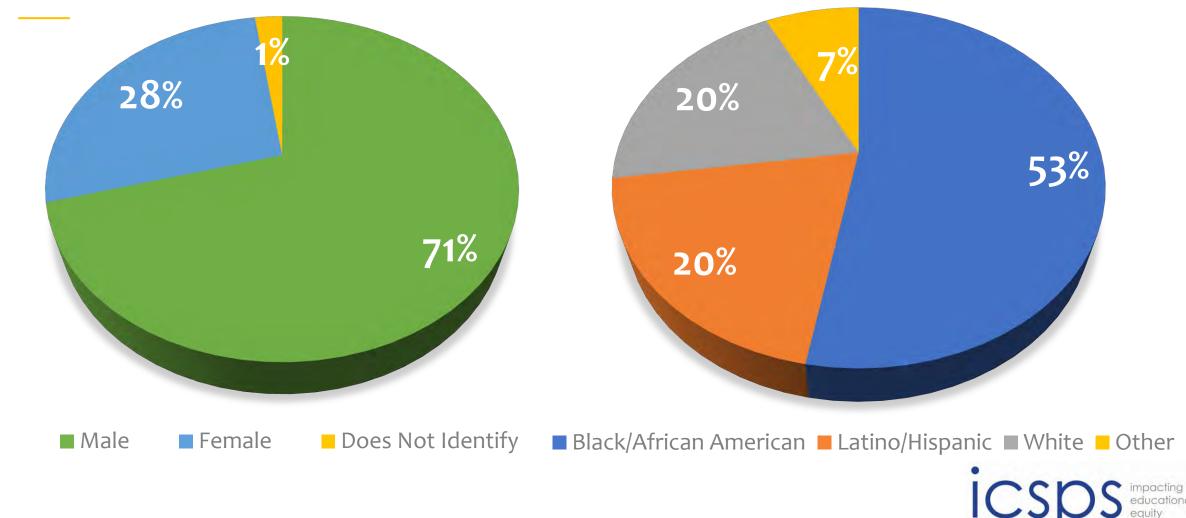
IT Career Lab

- 6 training locations
 - 4 throughout Chicagoland
 - 1 in Minnesota
 - 1 in Wisconsin
- Training runs in a group setting over a period of 16 weeks for 20 hours per week
- Certifications are bundled into a track of classes
- Exams are baked into the overall class structure
- Employer feedback drives training and adaptation to market needs





Participant Demographics



Illinois State University, College of Education

































COVID Adaptations

- Instructional transition to 100% virtual-live was seamless
- Certification exams are required to be proctored
 - Certifying bodies were slow to create/allow virtual testing
- Program structure eliminated barriers by providing laptops to participants
 - Cost of laptops is baked into overall program tuition
- Participant internet connectivity challenges
 - Provided hotspots as needed
- Outcomes are similar to pre-COVID





COVID Adaptations

- Senior participants experienced extreme difficulty adapting to online services
 - Limited access to and knowledge of technology (including cell phones)
 - Reliance on others for assistance isolation from support
 - Internet availability and/or affordability challenges
 - Physical challenges with tech (visual and/or dexterity challenges)
 - Ambivalence and/or lack of information about various technologies and the internet





Innovative Programming

- Piloted online digital literacy training for seniors
- College students hired as part-time trainers
 - Generational interaction
 - 30 hours of train-the-trainer
 - Scheduled around their classes
- Internet-connected laptops mailed to participants





Innovative Programming

- Total of 80 hours live instruction
- Training is conducted online multiple times per week and focuses on:
 - Basic computer usage
 - Microsoft Office products
 - Internet usage (do's and don'ts) and security
 - Social media basics
 - Emailing
 - Job search
 - Personal information security
 - Telehealth access





Critical Needs

- "Supportive services" should not be limited to transportation
- Funding flexibility to supply program participants with technology
 - Laptops
 - Hotspots
 - Internet access (if no-cost option is unavailable)
 - Cell phones
- Subsidized employment
- Staff training
- Organizational investments





MATT WEIS
CHIEF PROGRAM OFFICER
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Richard G. Bush, Ph. D. Dean,
Career Programs
Blackhawk Community
College







Students struggled in complex / gatekeeper courses...

Ex.: Anatomy and Physiology related courses often slowed students going into health care fields.



Some needed more time to hone their skills...

Ex.: Welding, CNC and manufacturing students needed more time and practice to develop their skills further.



Some lacked the preparation for study...

They lacked the skills to study in an enhance learning environment where technology and the Internet play a significant role, but they lack access to those at home to be successful.



Others need to connect with the instructor and content...

For some, lectures and labs are okay, but they needed a boost to really get the topic.



Our Initiative to Transform Manufacturing and Health Care

1. Immersive Learning

Leverage the immersive learning potential of AR / VR technologies across Business, Healthcare, Manufacturing and IT

4. Wrap Around Services

Intentional student support through tutoring, career services, and virtual career fairs.

2. Work Based Learning

Working with area employers to increase their commitment to and opportunities for work based learning.

5. Accelerated Learning Pathways

Increase the linkages across a career pathway to encompass bridge programs, career and technical programs and work based learning.

3. Design / Implement Accelerated Learning Strategies

CBE, Bridge Programming, Dual Credit, Integrated Education and Training, and non-credit to credit transitions.

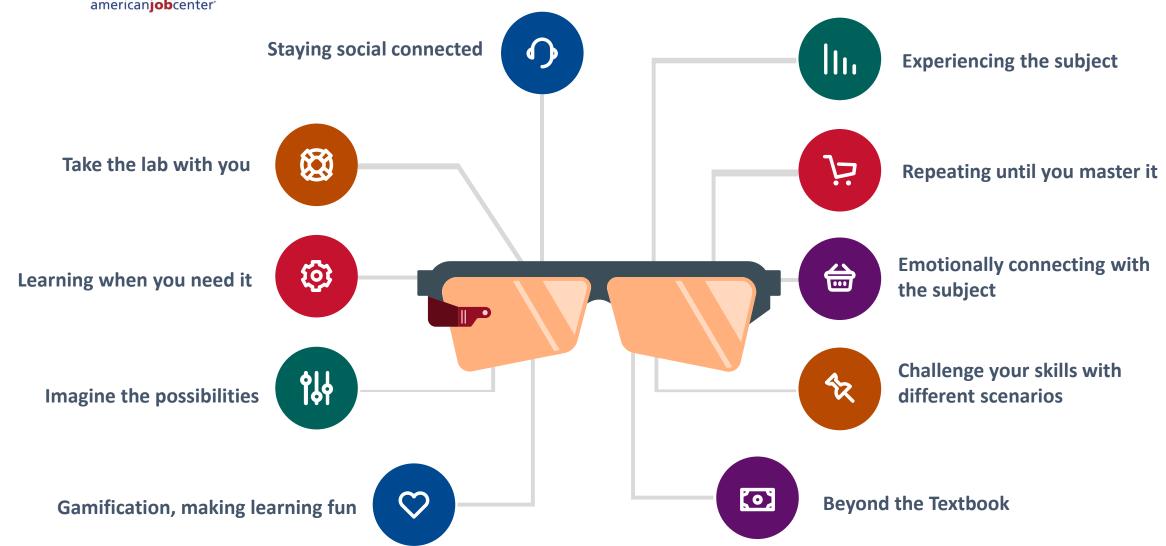
Augmented and Virtual Reality

In the coming months and years we will be integrating immersive learning technologies into our manufacturing and health care careers to a) improve student knowledge of complex topic or to hone their skills, b) increase retention of the newly acquired knowledge, and c) help students advance in a timely manner through their programs of study.





Immersive Learning...just the beginning





Edwin Braun @ebraun14 Instructional New Braunfels ISD



VR Integration to help address inequities in The Digital Divide

- Points of discussion:
- How Virtual Reality has been used to **enhance** the education experience for **all levels of learners**... Special Needs, ELLs, Reading Intervention Students, GT, K-12 general pop., and even professional staff!
- Key Concepts: Gamification, Kinetic Learning/ Acquisition/ Internalization, Task based, Problem Solving, Connections, Bridging Inequities, Beyond the Zoom





NBISD VR Program Background

- 2015 Superintendent supplies Google Cardboards to all campus principals

• 2016 High School 3D Design and Animation program experiments with 360 renders delivered vía Google Cardboard, then Samsung Gear VR vía YouTube.



• 2017 NBISD acquires 1st set of 8 ClassVR Headsets. (2020)We now have 40 total ClassVR HMDs throughout the district.



• 2018- First HTC Vive Pro acquired by tech. dept. and introduced to staff.



• 2019-2020 Grants awarded, campus purchases of portable VR workstations (repurposed tv monitor carts with custom built PC and Oculus Rift S) now total 8.





Use examples: ClassVR (instructor controlled delivery of 360 images and videos)





Middle School and Elementary ELLs (descriptive vocabulary focus, cultural awareness, etc.)





Use examples: ClassVR (instructor controlled delivery of 360 images and videos)

Holocaust Survivors





High School Reading Intervention Students >>>AP Spanish Literature





Fully Interactive VR (Oculus Rift S,











The Great C- Dystopian Comparison





Anne Frank House VR

High School Reading Intervention Students (descriptive comparative literature discussions, virtual museums etc.)







High School
"Gateway" Special
Needs Program,
Job simulator for
Task repetition



High School CTE:
Automechanics
"Wrench" VR
Engine building
simulator







Gifted and Talented Program- Team "Escape Room VR Challenge"



Advanced Placement Spanish: Coco VR Interactive GooseChase Competition



High School GT and AP programs (teamwork strategies, kinetic learning, etc.)







Faculty and Staff
Training- Health
Occupations, District
Nurses, CPR (DualGood
Health), Arson Detection
and Crime Scene
Investigation (RiVR)





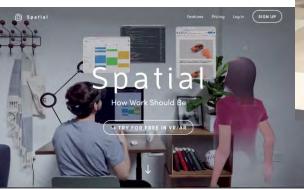
Closing Thoughts- What is to come?

• Multi-user Platforms (3D Organon, The Wild, etc.)

• Collaborative Platforms (VirBELA, FrameVR (webxr), Engage, Spatial, AltSpace...)

VR/AR/XR potential...













Richland Community College Nick Gorenz **Commercial Driver's License Program Seth Brozio**

Seth Brozio
Highway Construction
Career Training Program



Moises Bernal Puente Central States SER & Illinois Digital Literacy Lab



Illinois Center for Specialized Professional Support,
Illinois State University, College of Education



IDLL's three core elements

- 1. Support for adult educators and their programs on how to effectively incorporate learning technology into the classroom, with subject-matter experts (SME's) and curated resources.
- 2. A facilitated learning community for educators and administrators to support, advise, and learn from each other and from the resources they find valuable.
- 3. Capturing insights about the most effective digital tools, delivery models, support strategies, which can then be shared across the state of Illinois.







IDLL's impact at Central States SER

- Left (students presenting their Northstar Digital Literacy certificates!)
- Right (taking out our brand-new Chromebooks for a spin!)



IDLL training and events

IDLL training



Chicago Google Headquarters





Increasing digital literacy in communities demanding equity



Professional Development







Illinois Center for Specialized Professional Support.
Illinois State University, College of Education