OFFICE FOR DIVERSITY, LITERACY & OUTREACH SERVICES

Digital Equity Through Literacy: Framing the Conversation

May 31, 2022

Digital Equity Through Literacy

Ken Bigger, Ph.D.
Senior Fellow
ALA Center for the Future of Libraries

Ken Bigger, brief bio

- Ph.D., Religious Ethics and Democratic Theory
- Career in fundraising and nonprofit management
- Former Exec. Dir. of Chicago Literacy Alliance
 - 100+ member organizations
 - Improve literacy by driving collaboration and increasing the impact of literacy organizations

Literacy (broadly*)

Facility with a vocabulary, knowledge base, and/or a particular means of communication that mediates human life in community and affords access to the shared tools of culture.

- Reading and writing are inventions/"technologies"
- Used for less than 3% of human time on the planet

* For illustrative purposes only, not ALA definition

Addressing Access and Achievement

- We need to address both:
 - Material inequality and barriers to access
 - Biased measurement and narrow definitions of literacy
 - Literacy empowers inclusion, <u>and</u> can be a tool of exclusion
- Opportunity gap drives the achievement gap, not the reverse
- The "goalposts" have moved on level of literacy needed for full participation

Moving "goalposts"

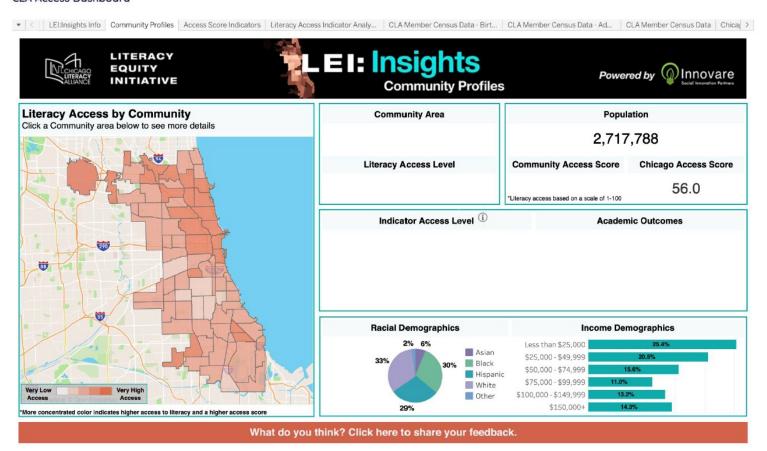
"Today's white-collar worker spends more time reading than eating, drinking, grooming, traveling, socializing or on general entertainment and sport—that is, five to eight hours of each working day. (Only sleep appears to claim as much time). **The computer and Internet? Both** are reading revolutions."

Steven Roger Fischer, A History of Reading

Mapping Access—"Traditional" and Digital

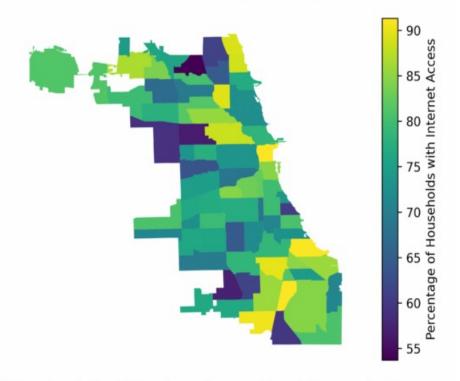
 Socioeconomic factors of access that correlate with effects on literacy rates (achievement)

- Influence of place
 - How does geographic location matter in a digital age?



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& outreach services

FINDING INEQUITIES BENEATH THE SURFACE OF DATA



Percent of Chicago households with Internet access, by community area. Data sources: American Community Survey (2015–2019) and City of Chicago Data Portal.

Longer term implications

- Socially
- Economically
- Politically

Employment patterns in "The Great Recession" (2008)

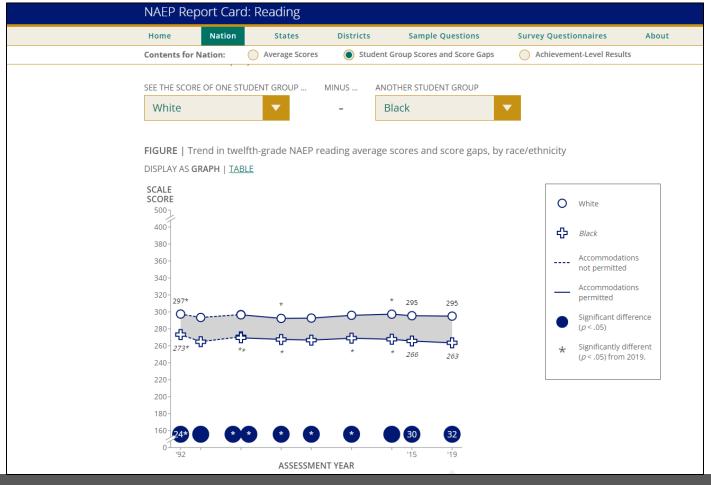
77% of jobs lost required high school diploma or less

 99% of the jobs created in the first 6 years of the recovery required post-secondary education

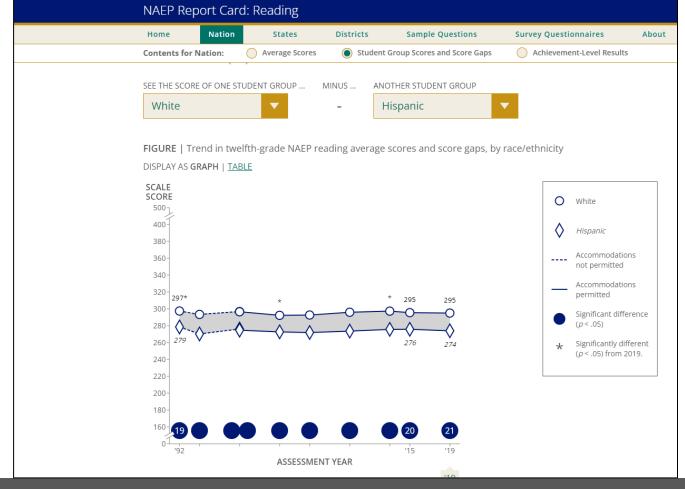
https://www.businessroundtable.org/why-reading-matters-and-what-to-do-about-it

Foundational literacy crucial for addressing digital divide

- Reading and writing proficiency needed for digital literacy
- Rapid pace of tech development
- Capacity to skill and reskill
- Access to services, healthcare, jobs, etc.

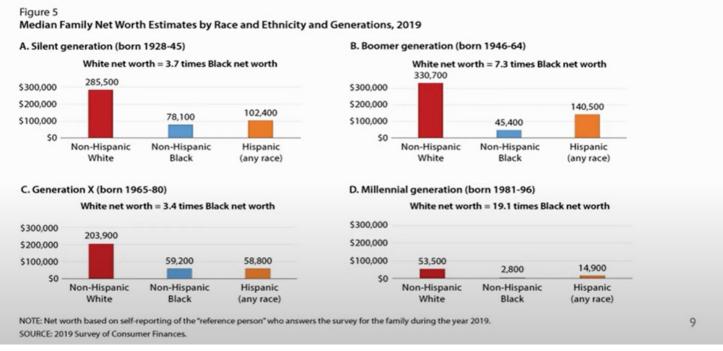


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Generational Wealth Rate by Race/Ethnicity

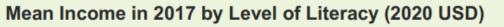


From Cathy J. Cohen's Gen Forward Project, slide from May 3, 2022 Ryerson Lecture at the University of Chicago

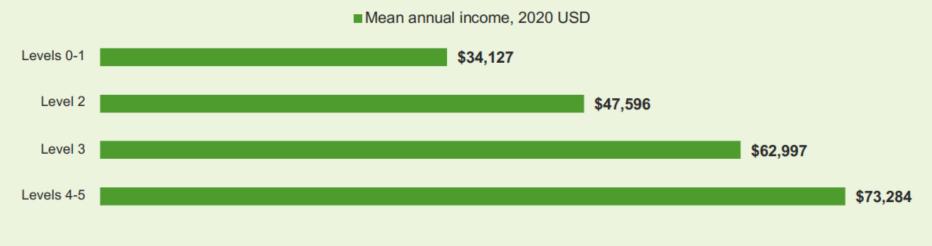
Economic impacts of reducing literacy inequity – Gallup study, 2020

- 54% of American adults read below PIAAC level 3 (adult equivalent of 6th grade level)
- 1 in 5 read below the equivalent of a 3rd grade level

PIAAC level strongly correlates with income



Source: 2012-2017 PIAAC U.S. State and County Estimates for Population; 2017 PIAAC for Income



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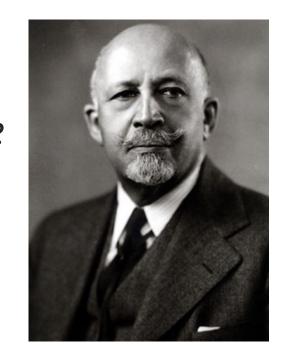
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Gallup study (2020) findings

"Getting all U.S. adults to at least a Level 3 of literacy proficiency would generate an additional \$2.2 trillion in annual income for the country. That is 10% of the gross domestic product."

"We should measure the prosperity of a nation not by the number of millionaires but by the absence of poverty, the prevalence of health, the efficiency of public schools, and the number of people who can and do read worthwhile books."

-- W. E. B. Du Bois (1953)



Scurlock Studio Records, Archives Center, National Museum of American History, Smithsonian Institution

Wrapping up

- Need to address literacy inequities at the structural level
- Respond to moving "goalposts"
- Focus on "more perfect union" and the literacy equity that it requires
- Broad benefits

Equity of Access to Information

John Agada
Senior Fellow
ALA Center for the Future of Libraries

John Agada

Bio-data

Professor Emeritus

Ph.D., (University of Pittsburgh) Library and Information Studies

Professional and Research Agenda:

Human Information Behaviors with special reference to

Under-served populations.

Orientation

This presentation advocates adopting a blended policy of equal and equitable access to information. Such approach would contain the digital divide's adverse impact on library communities.

Libraries and the Digital Divide

Information technologies enhanced production and distribution of information since the past century.

However, this information explosion did not guarantee universal access as information technologies have dual capacity for ushering social equity or a digital-divide.

Equality and Equity of Access

Beyond equal access, (libraries) must simultaneously pursue strategies seeking to effect equity...Thus, in so far as policies aim to achieve equality of access, they must also assimilate more narrowly focused policies that aim to achieve equity; for ultimately, there can be no equality without justice.

Nancy Kranich, Equality and Equity of access: What's the difference? ALA, March 3, 2005.

Equality and Equity of Access

Equality implies providing the same levels of opportunity to all (Fairness). Opportunities are means to ends, such as access and effective use of library services to resolve information needs.

Equity acknowledges diversity in individual needs and capacities. Libraries seek to *balance fairness with justice* by customizing service models to overcome systemic obstacles to meaningful *outcomes*.

Equity of Access to Information

Inequities of information access and use have important cultural as well as socio-economic consequences for civic rights and political participation.

Equity is more purposeful compared to equality-oriented programs as they are designed to address specific needs with measurable outcomes.

Implementing Equality of Access The Global Approach

<u>Community Analysis</u> (based on Group, Agency, Lifestyle and Individual data sets) reflect differences in information needs, access and use patterns, even within groups of similar socio-economic groupings.

Library services based on this approach address diverse needs with responsive service models, such as books on shelves (Passive model); Reference service (Reactive model) and Information Literacy instruction (Proactive model).

Implementing Equity of Access The Customized Approach

Community Analysis data serve as proxies for information needs.

Unlike shelter and food, information has value only when a recipient has need for and capacity to process it. The Customized approach therefore relies on research-based user profiles to guide mediation of clients' information seeking and use.

Uniqueness of clientele needs and circumstances determine how services could be customized to facilitate access and use, such as providing information literacy training or services in languages other than English.

The Digital Divide and its Cultural Precedents

Historically, the dominant literacy in each era (e.g. writing, print, media, digital) is central to economic production in society. Each literacy skill is embedded in compatible knowledge and value-systems.

Today, literacy entails the ability to create, share and understand knowledge in an increasingly digital, text-mediated, information-rich and fast-changing economy. Rates of literacy diffusion reflect cultural, racial, class and economic divides in society.

WHAT IS UNIQUE ABOUT DIGITAL LITERACY?

Digital Literacy entails

- (i) *Multiple literacies*: Information, Media, Graphics, Hypertext, Reproduction and Socio-emotional;
- (ii) *Thought processes:* Cognitive, Technical (Psychomotor), Ethical (Social and Emotional) skills; and
- (iii) Content Area: Creation, diffusion and application of knowledge in all disciplines.

Hard/ Software	Cognitive	Technical	Ethical
Information (Digital Content)	Synthesis	Access, Usage	Appropriate Usage
Computer (Hardware and software)	Evaluate	Usage	Appropriate Usage
Media (Text, sound, image, video, social)	Create/Critique	Navigation	Assess Accuracy
Communication (Non-linear interaction)	Create/Critique	Develop and use content	Appropriate Usage
Technology (Tools for life situations)	Invent, Evaluate tools	Usage	Appropriate usage
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THE DIGITAL-DIVIDE IN SOCIETY: An Illustrative Case

At the peak of Covid lockdowns in April 2020, persons from low income minority neighborhoods ventured out of their homes 135% more than residents of more affluent white neighborhoods compared to pre - Covid levels.

Clearly, poor access to digital connectivity and work-from-home jobs rendered minorities with few choices but to venture out of their home to make a living, even with peril to their lives.

(America's Racial Gap & Big Tech's Closing Window. Sept. 2020).

Illustrative Case Study Assumptions – Based on Studies

The communities are on different sides of the Digital Divide. The more affluent Community will be identified as A; as the less affluent Community as B.

Research-based profiles suggest the following:

The Communities differ on the average with respect to educational attainment and socio-economic levels. Community A has more access to a wider range of IT hard and software resources in the home than Community B.

Community B on the average record more frequent activities on hand-held devices (within and outside the community) than Community A.

Implications for Policy Approaches

It is apparent in this case that members of both communities have digital literate residents. However, acquisition of digital skills alone does not qualify for a professional career in the digital economy. Community A residents who work remotely are engaged in more content creation and related thought processes than Community B. residents..

Based on analysis of needs and levels of participation in the economy, the community public library could adopt a combined Equitable and Equity Access policy approach. Such approach would customize services and instruction in digital skills, knowledge and value systems to match emergent job opportunities in the digital economy.

SUMMARY

Libraries operate at the intersection of Equal and Equitable access to information. Maintaining this dual perspective has become more urgent as the digital economy seems to simultaneously centralize and decentralize information and power – social, cultural, political and economic in contemporary society.

As a democratic institution, libraries remain one of a shrinking group of public institutions that strive to balance equity with equal access to information for all. For many, the library is their only avenue to realizing their dreams.

School Library Perspective

Cassandra Barnett

Program Advisor for School Libraries
Arkansas Department of Education's Division
of Elementary and Secondary Education

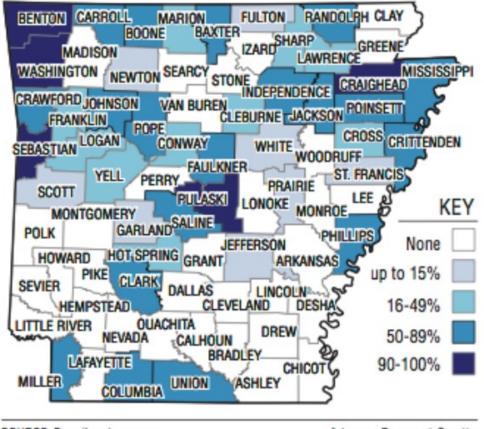
cassandra.barnett@ade.arkansas.gov

- US Census Bureau estimates about 17 million households have no broadband access of any kind.
- Approximately 1 in 4 people(4.6 million) living in rural and tribal areas lack access to broadband connections.
- Estimated cost to wire 98% or rural America -\$40 billion

AASL surveyed school librarians during pandemic:

- 55% of students had access to necessary technology
- 42% of educators had access to technology or connectivity
- 76% of students lacked access to stable internet
- 79% of parents/guardians/caretakers unable to monitor or manage learners

- Approximately 84% of students and teachers reported technology issues such as connectivity and software glitches.
- Approximately 70% of learners lacked the digital/media literacy skills needed to be successful in virtual learning.



Arkansas Broadband Map

SOURCE: Broadbandnow.com

Arkansas Democrat-Gazette

Arkansas Statistics:

- Basic cost of living for family of 4
 \$46,000
- 1 in 3 families with children live below the poverty level
- 41% of state population resides in rural counties

- 1054 School Libraries
- 229 Public Libraries
- 57 Academic Libraries
- 3 Specialized Libraries

Library Responses:

- Upgraded websites
- Used ESSER funds to purchase devices, hot spots
- Increased digital resources (including OERs)
- School and public libraries form partnership to share resources
- Even when closed, kept internet access available
- Provided technical support
- Found ways to continue instruction

*Even before the pandemic, school libraries were often the only place that students had access to print and online resources.

New Jersey Libraries: Working together for Digital Equity

Presented by
Mimi Lee
Director of Literacy & Learning
New Jersey State Library

"Digital Equity through Literacy: Framing the Conversation"

ODLOS & Committee on Literacy American Library Association May 31, 2022 2:00 PM – 3:15 PM Central Time

<u>Agenda</u>

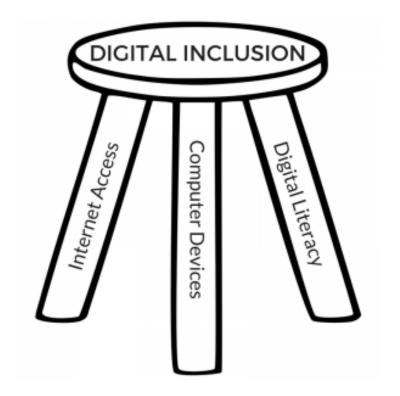
Definitions

NJSL+Partners Literacy Project

- -Program Models
- -Participating Libraries
- -Program Design & Curricula
- -Evaluation
- -Success Stories

Partnerships

Thank you



Three-legged stool of digital inclusion

Digital Inclusion refers to the activities necessary to ensure that all individuals and communities, including the most disadvantaged, have access to and use of Information and Communication Technologies (ICTs).

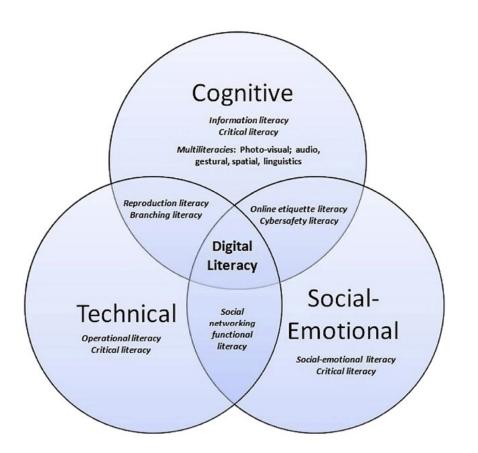
(National Digital Inclusion Alliance)



<u>Digital Literacy</u> is the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills.

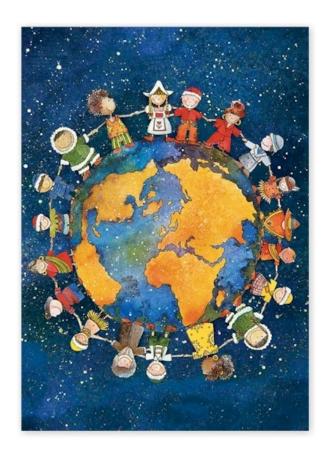
A person with digital literacy skills:

- Possesses the variety of skills technical and cognitive required to find, understand, evaluate, create, and communicate digital information in a wide variety of formats
- Is able to use diverse technologies appropriately and effectively to retrieve information, interpret results, and judge the quality of that information;
- Understands the relationship between technology, life-long learning, personal privacy, and stewardship of information;
- Uses these skills and the appropriate technology to communicate and collaborate with peers, colleagues, family, and on occasion, the general public; and
- Uses these skills to actively participate in civic society and contribute to a vibrant, informed, and engaged community. (American Library Association Digital Literacy Task Force)



What is Digital Literacy?

https://dicte.oslomet.no/wpcontent/uploads/2019/03/DICTE-Digital-Competence-in-Teacher-Ed.-literature-review.pdf



Digital Equity is a condition in which all individuals and communities have the information technology capacity needed for full participation in our society, democracy and economy.

Digital Equity is necessary for civic and cultural participation, employment, lifelong learning, and access to essential services.

(National Digital Inclusion Alliance)



Digital Divide

The gap between those who have affordable access, skills, and

support to effectively engage online and those who do not.

Digital Equity (what/goals) Digital Inclusion (how/activities): Access/Device/Training







NJSL

Plainfield Public Library

NJ Library Association

Hub and Spoke Libraries

Access Navigators Program

Hub Libraries

Atlantic City Free Public Library Paterson Public Library Red Bank Public Library

Spoke Libraries (11)

Bradley Beach Public

Library

Burlington County Public

Library

Cumberland County Public Library

Florham Park Public

Library

Gloucester City Public

Library

Gloucester County Public

Library System

Newark Public Library South Brunswick Public

Library

Trenton Public Library

Union City Public Library West Orange Public

Library

Access Navigator Libraries (12)

Butler Public Library Elizabeth Public Library Keyport Public Library Long Branch Free Public Library

Montclair Public Library North Bergen Free Public

Library

Pennsauken Free Public

Library

Princeton Public Library Wanaque Public Library Warren County Library

West Deptford Free Public

Library

Wharton Public Library







Hub Libraries (3)

Atlantic City Public Library Paterson Public Library Red Bank Public Library

Spoke Libraries (11)

Bradley Beach Public Library

Cumberland County Public

Library

Florham Park Public Library Gloucester City Public Library

Gloucester County Public

Library System

Newark Public Library

South Brunswick Public Library

Trenton Public Library Union City Public Library

West Orange Public Library

Access Navigator Libraries

<u>(12)</u>

Butler Public Library

Elizabeth Public Library Keyport Public Library

Burlington County Public Library Long Branch Free Public Library

Montclair Public Library

North Bergen Free Public

Library

Pennsauken Free Public Library

Princeton Public Library

Wanaque Public Library Warren County Library

West Deptford Free Public

Library

Wharton Public Library

Digital Literacy Certification Pathway

Project Empower!: Digital Literacy Pathway for New Jersey Libraries

Digital Literacy Certification Pathway

Technology/Computer Literacy

- - Digital Literacy Competence-ADVANCED



- Adult Literacy
- Workforce Literacy
- Financial Literacy
- Technology/Computer Literacy
- Digital Literacy Competence-BASIC

IC3 (Internet Core Competency Certification)

Step 1: Spark (entrance exam)

Step 2: Key Application

Technology/Computer Literacy Digital Literacy Competence-INTERMEDIATE-ADVANCED

Step 3: Computing Fundamentals

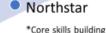
Steps 4: Living Online

*Each step is a separate certification

*Having Steps 2-4 makes a patron IC3 certified (GS5: Global Standard 5).

*Each certification is equivalent to one college credit in computing science (by American Council on Education)





*Essential computer and software skills.

*Certification obtained after taking the 3day Basic Computer Class and passing 11 modules: Basic Computer Skills, Internet Basics, Using Email, Microsoft Word, Microsoft Excel, Microsoft PowerPoint, Mac OS, Windows 10, Social Media, Information Literacy, Career Search Skills





IC3 Certification

IC3 Certification is an abbreviation for the "Internet and Computing Core Certification".

IC3 is a global certification designed to certify an individual's digital literacy skills associated with basic computer and internet use.

Participants are required to take and pass three exams: 1) Computing Fundamentals, 2) Key Applications, and 3) Living Online.

The average income of professionals who have that IC3 certification is higher than the minimum wage.

The IC3 Digital Literacy Certification is a great place to start if you're either planning a career in IT or wanting to become more effective with technology.

IC3 was created by Certiport, Inc. in 2000.



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Join us for

FREE COMPUTER TRAINING

Learn computer skills & gain your Digital Literacy Certification from your local library through our remote IC3 Boot Camp!

IC3 REMOTE BOOT CAMP: MAY 23 - JULY 21

- No cost to you!
- Entry-level computer training
- In-person support at your local library
- Instructor-led classes taught in English
- An in-person or online remote class option for you to choose from



Questions? Contact Sarah Antonelli at sarah.antonelli@plfdpl.info or (908) 757-1111 x142.















As more people find their employment journey crossing multiple careers, industries, and roles, the need grows for programs that quickly and efficiently help job seekers update and certify their skills, particularly in Digital Literacy. Few modern jobs do not require the ability to proficiently, efficiently, and securely, use technology and the Internet.

That is where institutions like New Jersey's Plainfield Public Library and Certiport come in.

"Plainfield is a community disproportionately affected by the disproportionately affected by the disproad divide," says Mary Ellen Rogan, PPL Director. The lack of access to computers and the skills that would come with that access hurts our residents, particularly when seeking employment. Wi-Fi, and public access machines are great, but they aren't.



enough to close the skills gap and level the employment playing field for our residents. We need to provide the training and certifications necessary for adults to reenter the workforce and thrive in jobs in today's economy."

In partnership with the City of Plainfield and The New Jersey Department of Labor and Workforce Development, PPL added an intense IC3 Digital Literacy and Microsoft Office Specialist training and certification program with the help of Certiport exams and prepared learning materials.

Certiport's industry-recognized certifications help define the knowledge and skills needed as a trusted metric to measure learning outcomes, while validating the learner's success and preparing them for 21st century employment.

The program has been a massive success due to a few important factors," says Scott Kuchinsky, PPL's Adult Literacy Coordinator, civing strong partnerships, client support, and high-quality training. "We also knew that an entry-level, industry-recognized digital literacy certification like Certiport's is one of the fastest and most cost-effective ways to make clients more employable. There is almost no career for which these foundational skills

would not be an asset and a huge value added."

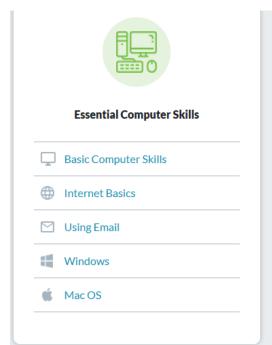
Certiports IG3 Digital Literacy contribution measures introductory computer skills that apply to almost any computer skills that apply to almost any career pathway. The program includes three exams to help one progress from a basic understanding to a mastery of the concepts required to be digitally literate. IG3 Spark targets the same foundational concepts as IG3 Digital Literacy but was created for individuals, who are totally new to computers and the Internet, to address their lack of digital skills.

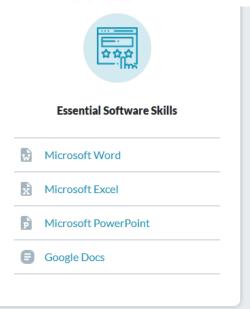
The Microsoft Office Specialist certification takes the next step to guarantee that every certified user has demonstrated the ability to command the features and functionality of Microsoft Office products, preparing them to get the most out of the these widely used applications.

"Offering a variety of certifications allows us to address our learners varied needs," says Colleen Connell, PPL Program Administrator. "We have participants who have never used a mouse, and we have others who come in wanting to learn Microsoft Access. The combination of offering IC3 and Microsoft Office Specialist certifications allows us to cater to both."











Using Technology in Daily Life

- Social Media
- Information Literacy
- Career Search Skills
- Accessing Telehealth Appointments
- Your Digital Footprint
- Supporting K-12 Distance Learning



https://www.digitalliteracyassessment.org















Diana Gowen and Goerge Forest in the Bradley Beach Public Library computer lab.

"After five weeks of being mentored in the North Star program, I've a better understanding of computer language, landscape, techniques etc. I like how the lessons are set up in progressive steps followed by review questions, making for smooth learning. Although the program has its quirks, all in all I highly recommend it for anyone wanting to learn or improve their computer skills. I'm a grateful student who went from being intimidated to having a new friend in my computer!"

— George Foerst







"The instructor is very pleasant and very patient and courteous. He helps you to comprehend what you don't understand. Helps me to stay encouraged and not to give up.

He helps reinforce my strengths where I am weak. It helps me get better each day."

............

— Barbara Thomas







Barbara Thomas and Guide, Christian Malave, using one of the computers in the Labor and Literacy Lab at the Trenton Free Public Library.

Measuring Outcomes & Impact

	Project Models		Forms	Timeline
Organizational Level	PPL HQ/Hub and Spoke Libraries	NJLA HQ/Access Navigator Libraries	Project Team Evaluation	October 1 – 31, 2022
Level	Library Admin (directors, staff coordinators)		Admin Evaluation	
	Lab Guides, Instructors	Access Navigators	Staff Evaluation	
Community Level	Patrons/Users/Clients/Students		Exit SurveyProgram Evaluation	February 1 – September 30, 2022 (7 months)

Key questions:

- How effective was NJSL+Partners project in providing in providing digital literacy services, particularly to individuals living in poverty?
- Did the two models achieve similar results?
- What were key barriers to implementation? What were success factors?





Moving Toward Digital Equity

Defining digital literacy

Frameworks, related terms, target audiences, needs, barriers

• Evaluating and measuring digital literacy

Standards, competencies, metrics, assessments

Social media, content creation, digital citizenship

Computer Literacy, Hyperliteracy, Internet Literacy, Web Literacy, Media Literacy, Transmedia Literacy, Information Literacy and more

- Equity & Inclusion
- Collaborations and partnerships









Photo by Mitchell Luo on Unsplash





Plainfield Public Library and New Jersey State Library Staff
Hub and Spoke Libraries Kick-Off Meeting, October 14, 2021@ Plainfield Public Library

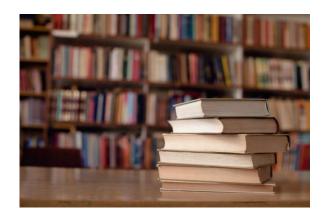




Access Navigators Team: NJLA, NJLA Access Services Task Force & NJSL Access Navigators Kick-Off Meeting, November 10, 2021 @ Monroe Township Library

NEW JERSEY ASSOCIATION OF COUNTIES County Government with a Unified Voice!

New Jersey State Library Launches Statewide Literacy Initiative To Address Adult Literacy, Workforce Development, And The Digital Divide



https://njac.org/new-jersey-state-library-launches-statewide-literacy-initiative-to-address-adult-literacy-workforce-development-and-the-digital-divide/



Questions?