

Portland State University

PDXScholar

Presentations and Publications

Advancing Digital Equity in Public Libraries:
Assessing Library Patrons' Problem Solving in
Technology Rich Environments

6-2016

Digging Deeper: Can Patrons Use Our Resources, and Are Basic Digital Literacy Classes Enough?

Cindy Gibbon

Multnomah County Library, cgibbon@comcast.net

Jill Castek

University of Arizona, jcastek@email.arizona.edu

Follow this and additional works at: https://pdxscholar.library.pdx.edu/digital_equity_findings



Part of the [Applied Linguistics Commons](#), and the [Information Literacy Commons](#)

Let us know how access to this document benefits you.

Citation Details

Gibbon, C. & Castek, J. (June, 2016). Digging deeper: Can patrons use our resources, and are basic digital literacy classes enough? Session organized by the Public Library Association (PLA) session at the American Library Association (ALA) conference. Orlando, FL.

This Presentation is brought to you for free and open access. It has been accepted for inclusion in Presentations and Publications by an authorized administrator of PDXScholar. Please contact us if we can make this document more accessible: pdxscholar@pdx.edu.

DIGGING DEEPER: CAN PATRONS USE OUR RESOURCES, AND ARE BASIC DIGITAL LITERACY CLASSES ENOUGH?

**CINDY GIBBON, MULTNOMAH COUNTY LIBRARY IN PORTLAND, OR
JILL CASTEK, PORTLAND STATE UNIVERSITY**

MEMBERS OF OUR PROJECT TEAM



- Amy Honisett
- Matthew Timberlake
- Patricia Moran
- Vailey Oehlke
- Judy Anderson
- Gloria Jacobs
- Stephen Reder
- Laura Hill
- Andrew Pizzolato

THIS WORK IS SUPPORTED BY



Advancing Digital Equity in Public Libraries: Assessing Library Patrons' Problem Solving in Technology Rich Environments (LG-06-14-0076)

TODAY'S PRESENTATION

Project
overview

Data
collection
tool

What
we're
learning

Discussion

NATIONAL & INTERNATIONAL EFFORT UNDERWAY TO EXAMINE ADULT SKILLS AND SKILLS USE (AGES 16-64)

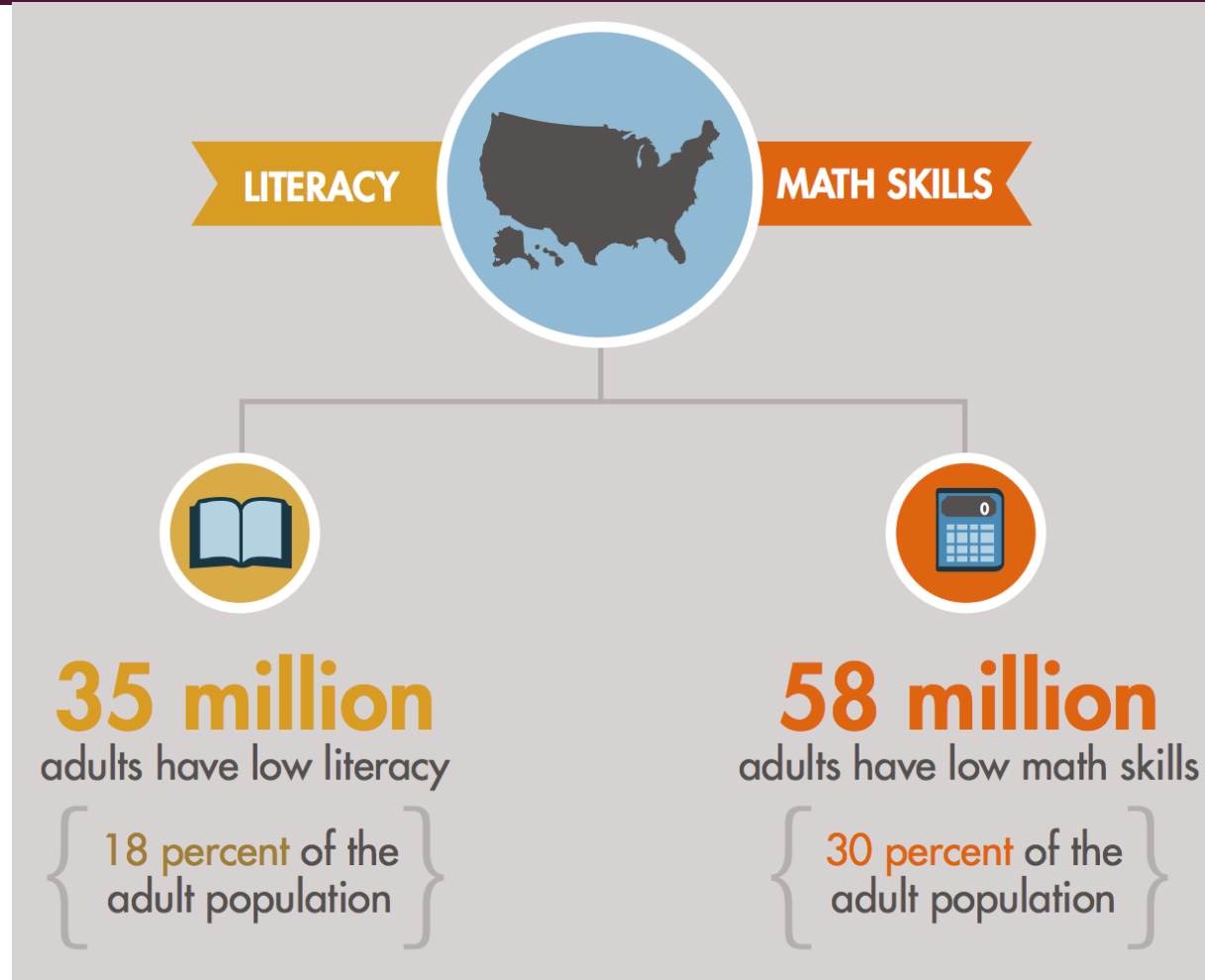


PIAAC

Programme for the International
Assessment of Adult Competencies

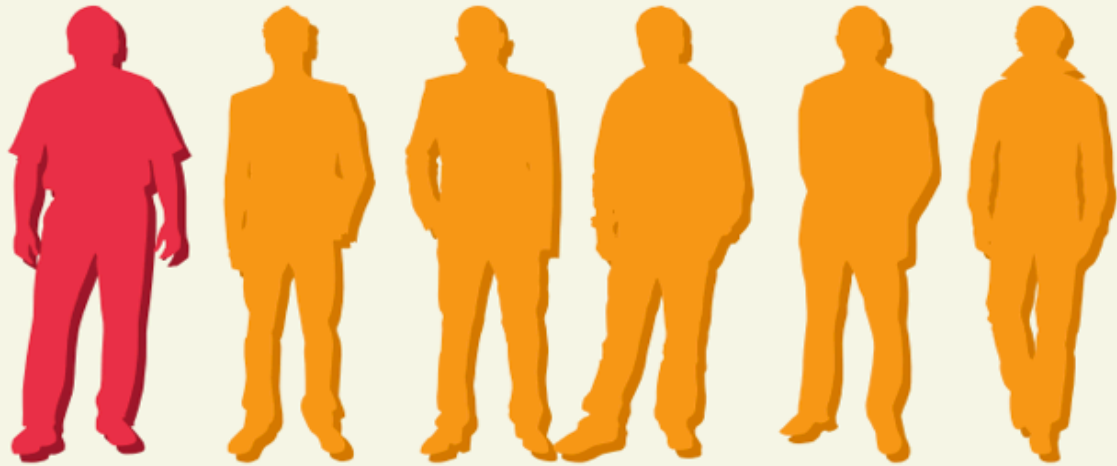
Assessment of adult skills by the Organization for Economic Co-operation and Development (OECD)

PIAAC RESULTS SHOW THAT



Source: PIAAC Gateway <http://piaacgateway.com/infographics/>

PIAAC RESULTS SHOW THAT



1 in 6 American Adults Have Less-Than-Basic Literacy



Nearly 1 in 3 Have Less-Than-Basic Numeracy Skills

PIAAC RESULTS SHOW THAT



The U.S. Lags Behind in Digital Literacy, Problem Solving

American adults performed below the international average when it came to using digital technology to acquire and evaluate information, communicate with others, and perform practical tasks.

What PIAAC Tells Us About Individuals With Low Basic Skills

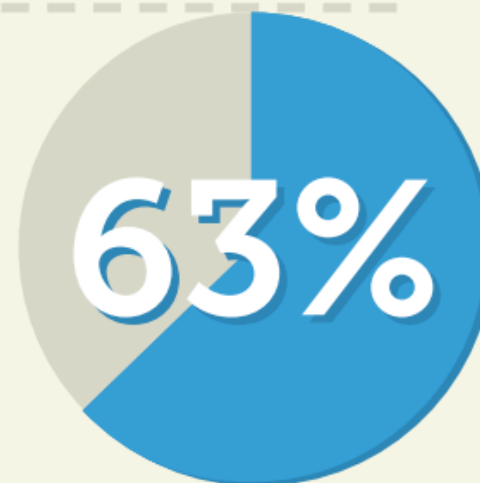


Many Have Earned a High School Diploma

20 percent of adults with a high school diploma have less-than-basic literacy skills and 35 percent of adults with a high school degree have less-than-basic numeracy skills.

Most Are Underemployed

63 percent of U.S. adults with low skill levels are employed, but earn low wages and lack the skills necessary to go to college or advance in their careers.



PIAAC RESULTS SHOW THAT



DIGITAL NATIVE DOES NOT MEAN TECH SAVVY

83%

of millennials say they sleep with their smartphones.



– YET –

58%

of millennials have poor skills in solving problems with technology.

U.S. millennials ranked

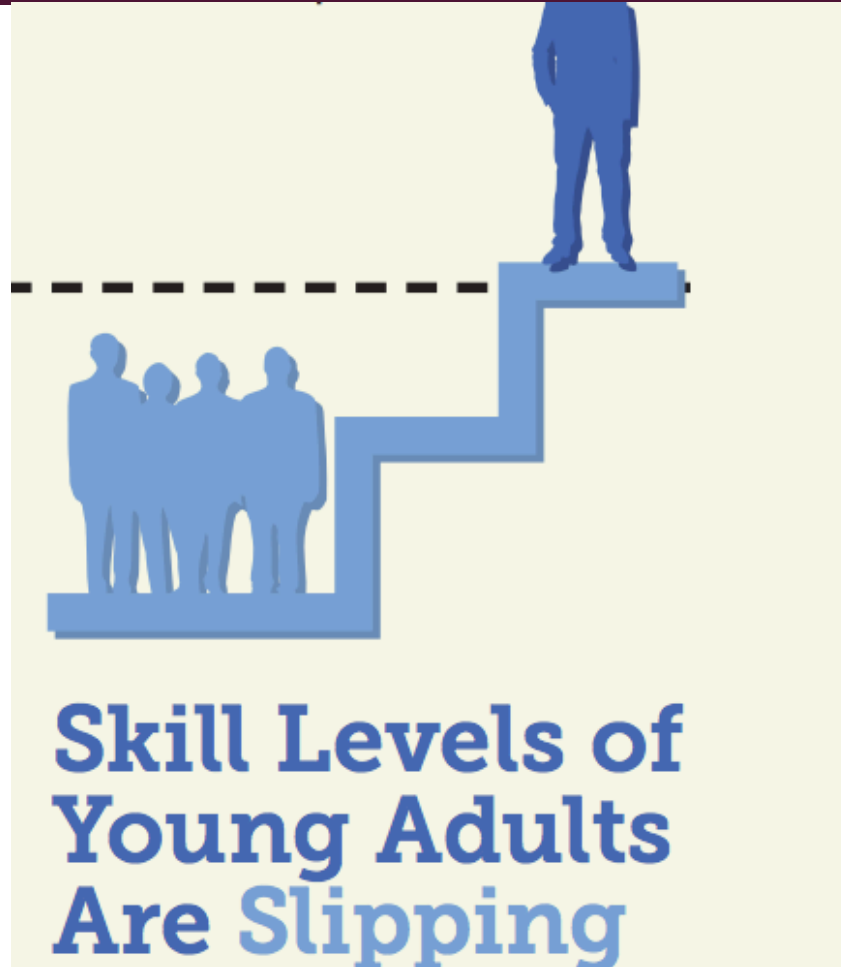
DEAD LAST

out of 19 countries tested in these skills.

19th



PIAAC RESULTS SHOW THAT



Source: PIAAC Gateway <http://piaacgateway.com/infographics/>

THE PIAAC RESULTS GIVE US A LOT TO THINK ABOUT

But also leave us wondering about...
Our patrons skills?

Library
Services

Classes

Electronic
Tools and
Resources

WHAT DOES THIS PROJECT INVESTIGATE?

- Digital Problem Solving Skills of Patrons
- Using PIAAC's Digital Problem Solving Assessment
- In order to examine...
 - instruction/training of digital skills
 - presentation of all of the library's web and digital interfaces and electronic tools



WHY COLLABORATE ON THIS PROJECT?



Extend national work on digital literacy and digital acquisition to inform local efforts



Maximize resources to meet community needs around lifelong learning and digital access



Bring libraries into the national & international PIAAC conversation

← Using Data from PIAAC's Digital Problem Solving Assessment (PSTRE) →

WHY ARE PIAAC DATA RELEVANT FOR LIBRARIES?

Libraries are institutions that ...

Support
interest-
driven
lifelong
learning

Provide hubs
for Internet
access and
digital literacy
training

Deliver
services using
technology

Include libraries in workforce development through the use of the PIAAC

What are Digital Problem Solving Skills?

As measured within
PIAAC's Assessment
Problem Solving in
Technology Rich
Environments (PSTRE)

Using digital technology, communication tools and networks to acquire and evaluate information, communicate with others and perform practical tasks..

The logo for the Programme for the International Assessment of Adult Competencies (PIAAC). It features the acronym "PIAAC" in a large, bold, blue sans-serif font.

Programme for the International
Assessment of Adult Competencies

CONTEXTS WHERE THESE SKILLS ARE ASSESSED

Workplace

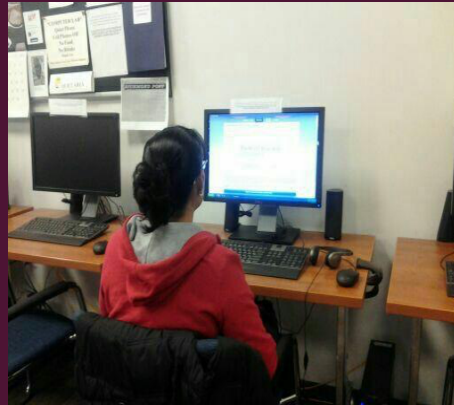
- Use of skills in careers

Personal

- Use of skills at home or for recreation or hobbies

Civic

- Use of skills in the community

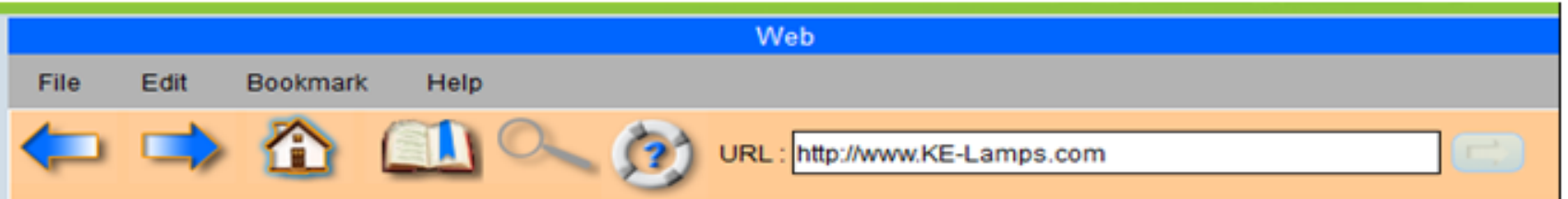


You ordered a desk lamp from KE-Lamps.com.

The desk lamp arrived, but it was not the color you ordered.

Using the company's website, arrange to exchange the lamp you received for the one you ordered.

Once you have finished, click Next to go on.



KE-Lamps.com

The best way to light your life

Bedroom Lamps

Desk Lamps

Floor Lamps

Table Lamps

New Arrivals

SALE!



[Customer Comments](#)

[Customer Service](#)

[Employment
Opportunities](#)

[About Us](#)

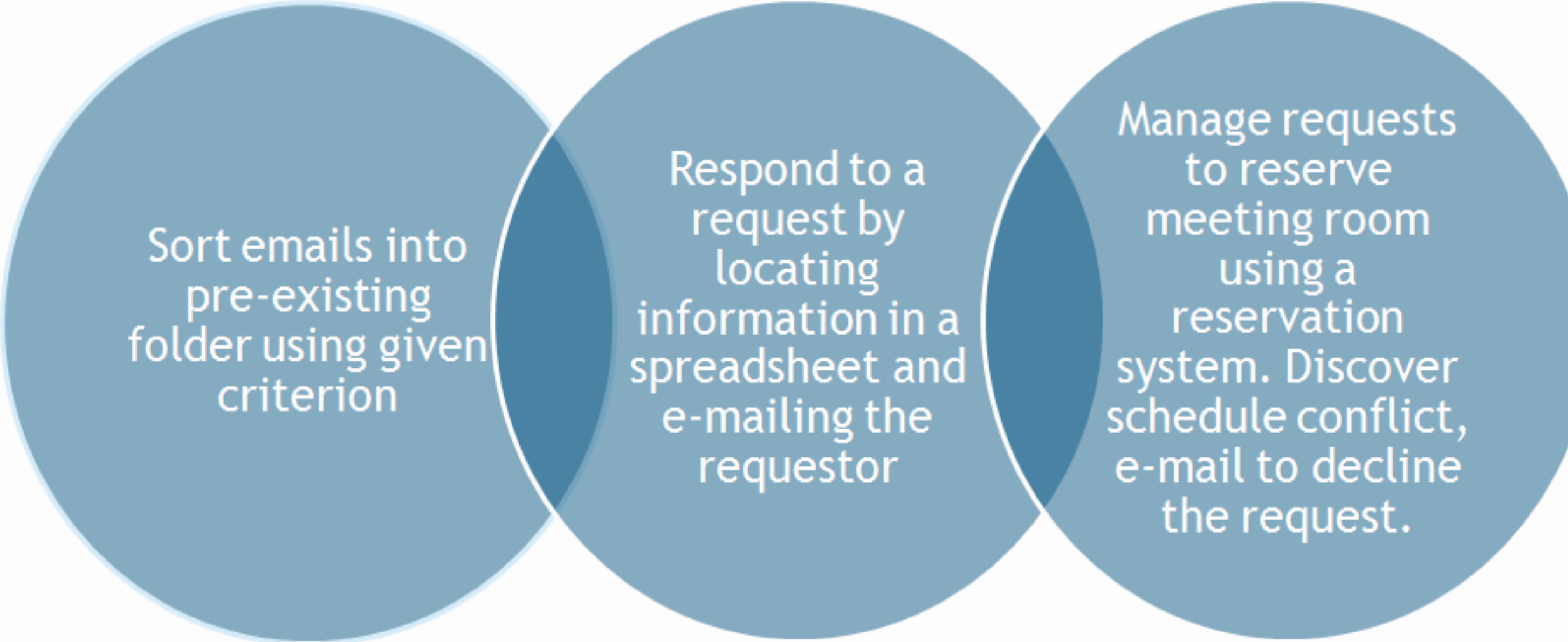


Web

Email(1)



LEVELS OF PROFICIENCY



Sort emails into pre-existing folder using given criterion

Level 1

Respond to a request by locating information in a spreadsheet and e-mailing the requestor

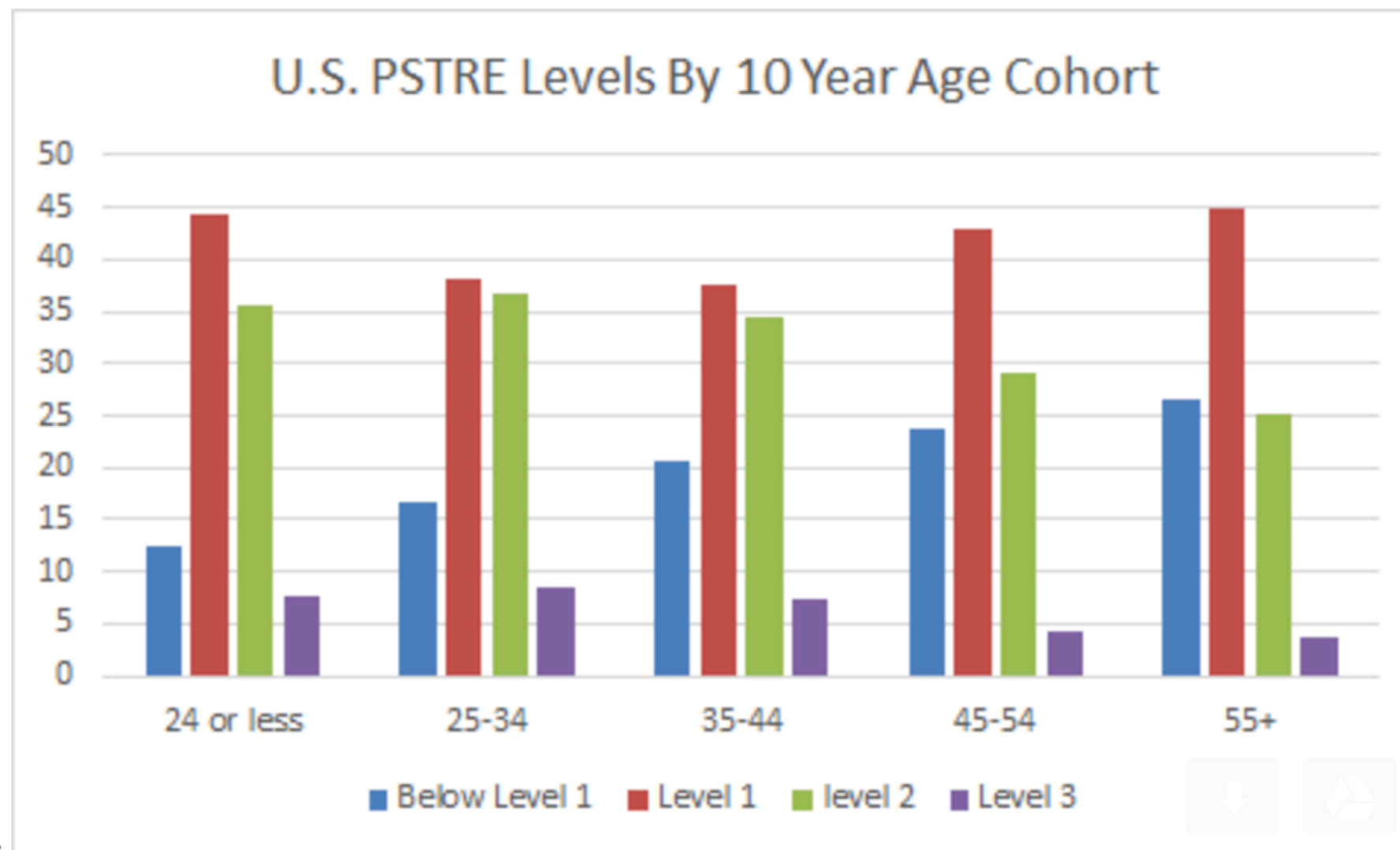
Level 2

Manage requests to reserve meeting room using a reservation system. Discover schedule conflict, e-mail to decline the request.

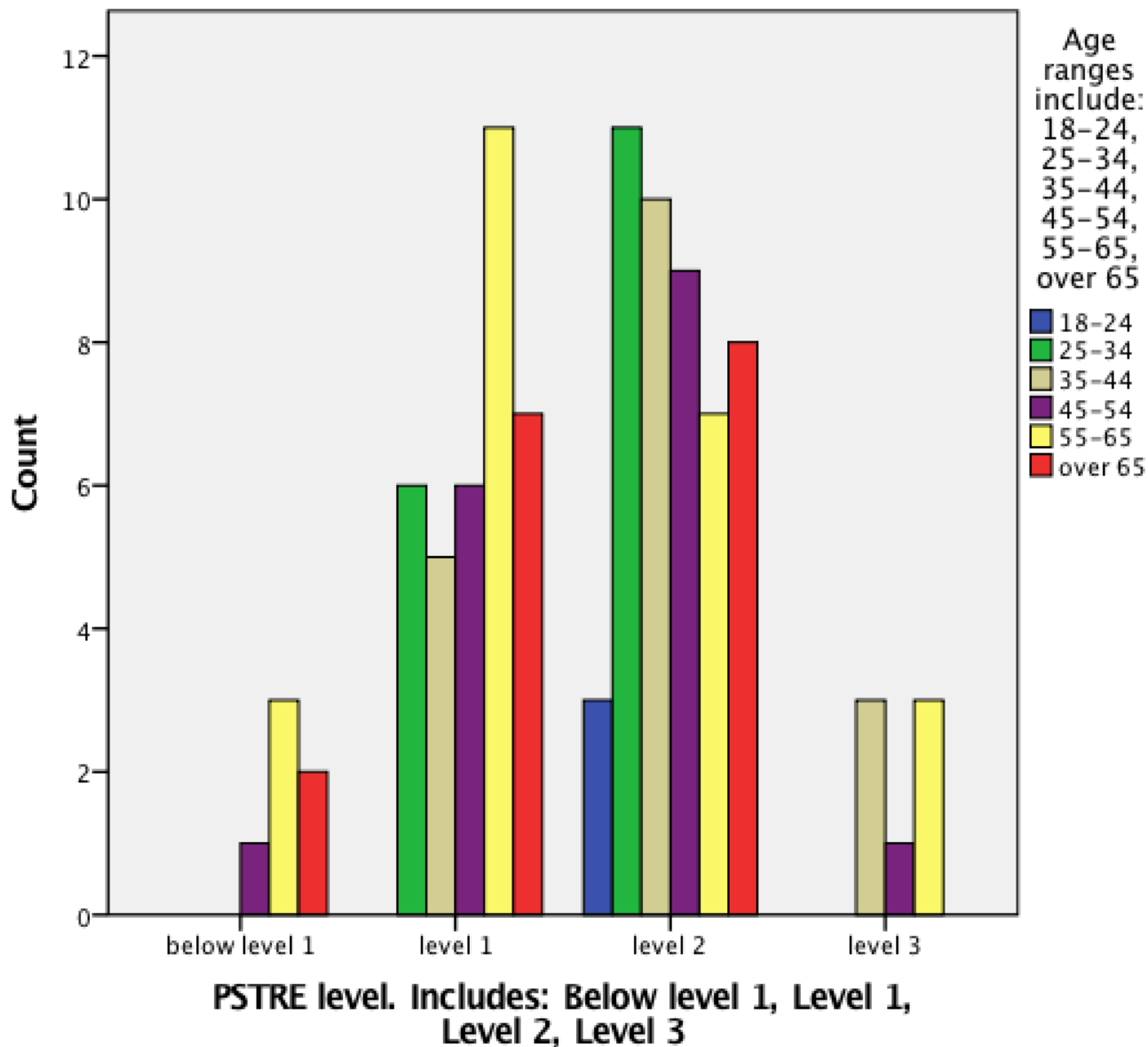
Level 3

Digging into the Data

National digital problem solving data by AGE



Bar Chart



Our Data

IMPLICATIONS: WHAT DOES AGE DATA MEAN FOR OUR LIBRARY?

- Avoid making assumptions about digital problem solving skills based on age.

Younger doesn't mean
more skilled

Older doesn't mean
less skilled

WE SUPPLEMENTED THE PIAAC DATA WITH A SELF ASSESSMENT

When I'm trying to do something online...

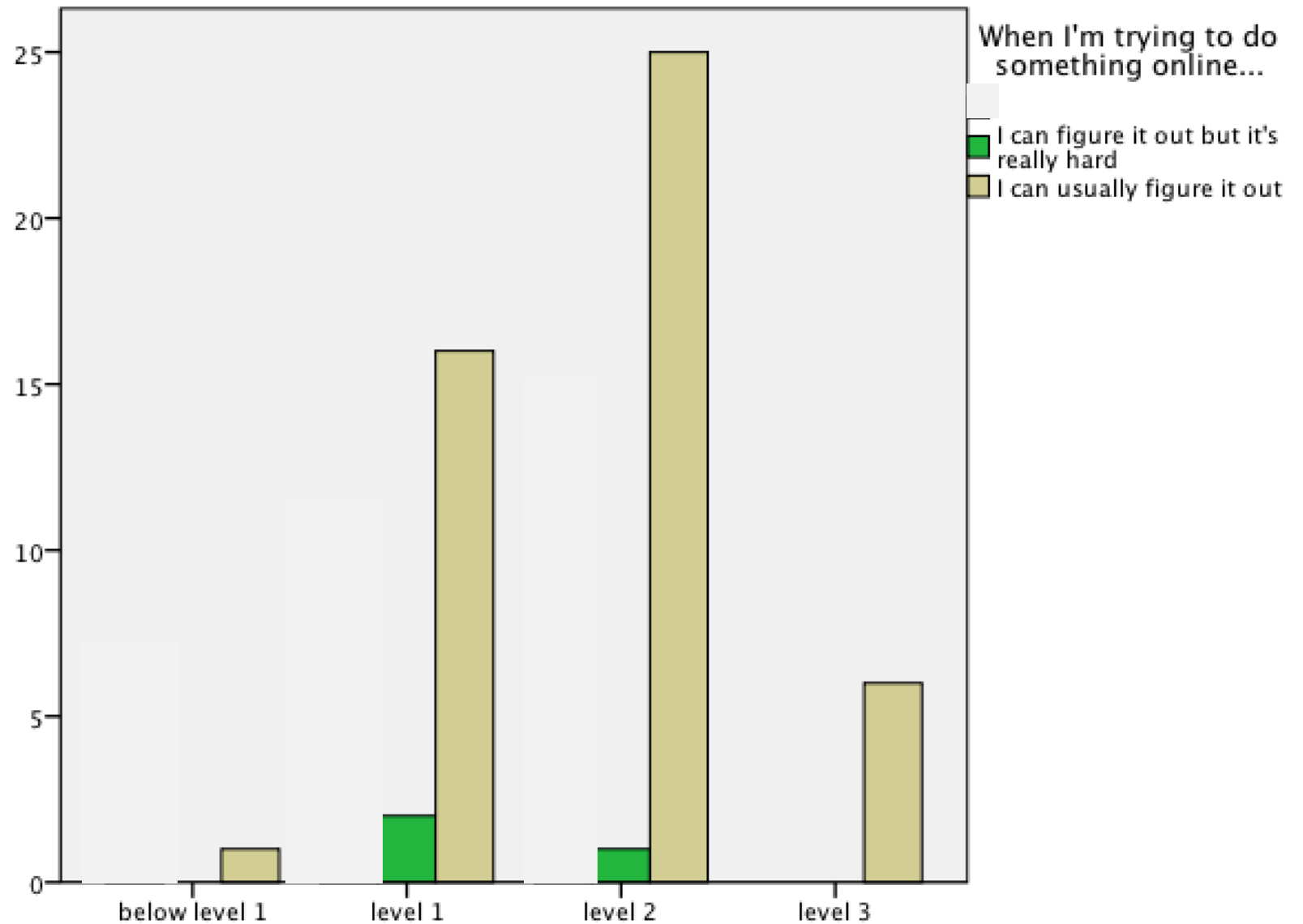
- I can usually figure it out
- I can figure it out but it's really hard
- I almost always get stuck

Do you have the skills to do what you need or want to do online?

- Yes
- No

SELF ASSESSMENT

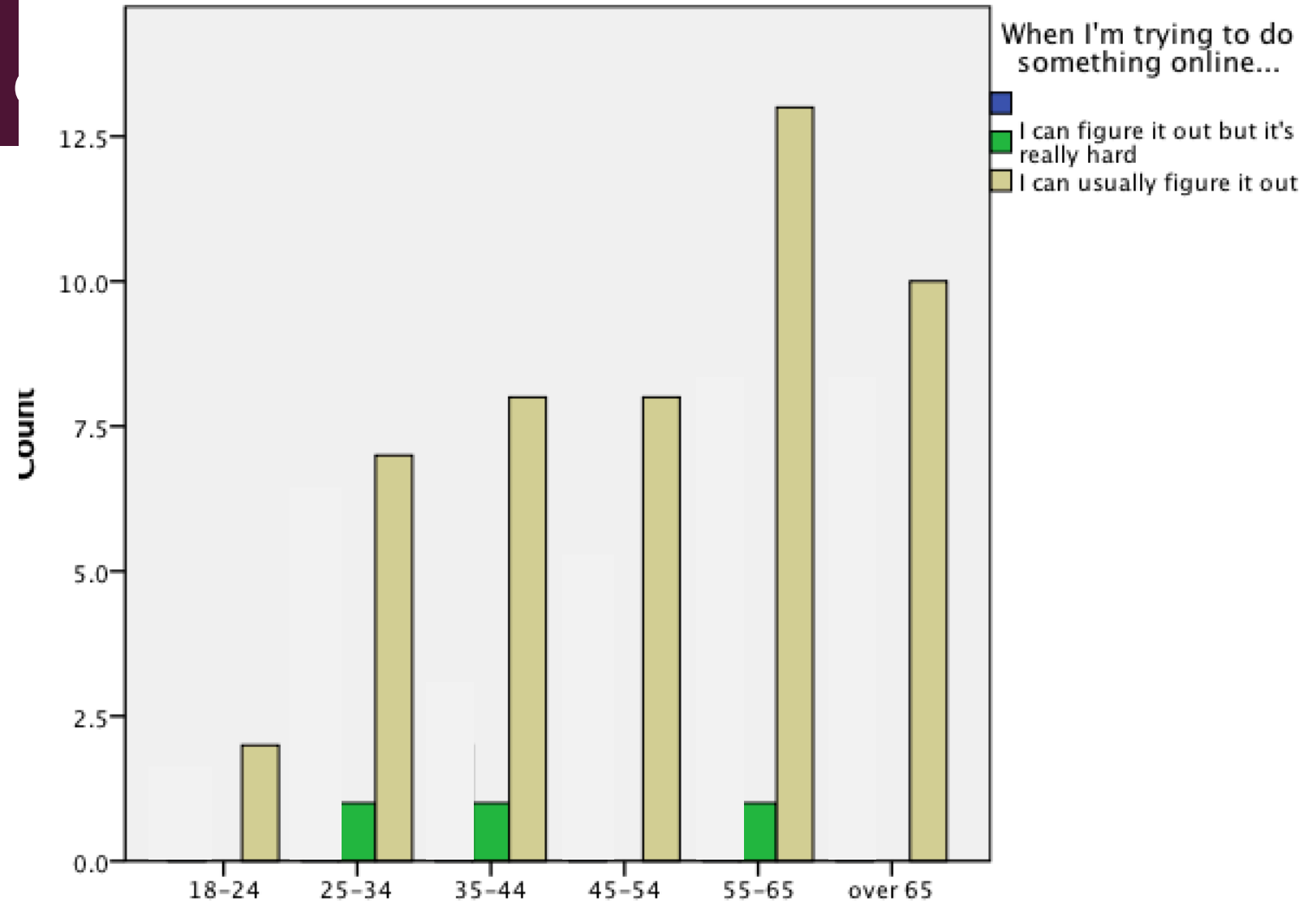
Bar Chart



PSTRE level. Includes: Below level 1, Level 1, Level 2, Level 3

SELF ASSESSMENT

Bar Chart



Age ranges include: 18-24, 25-34, 35-44, 45-54, 55-65, over 65

HOW DOES SELF-ASSESSED SKILL IMPACT OUR PROGRAMMING?

Most people think they're skilled and efficient at digital problem solving

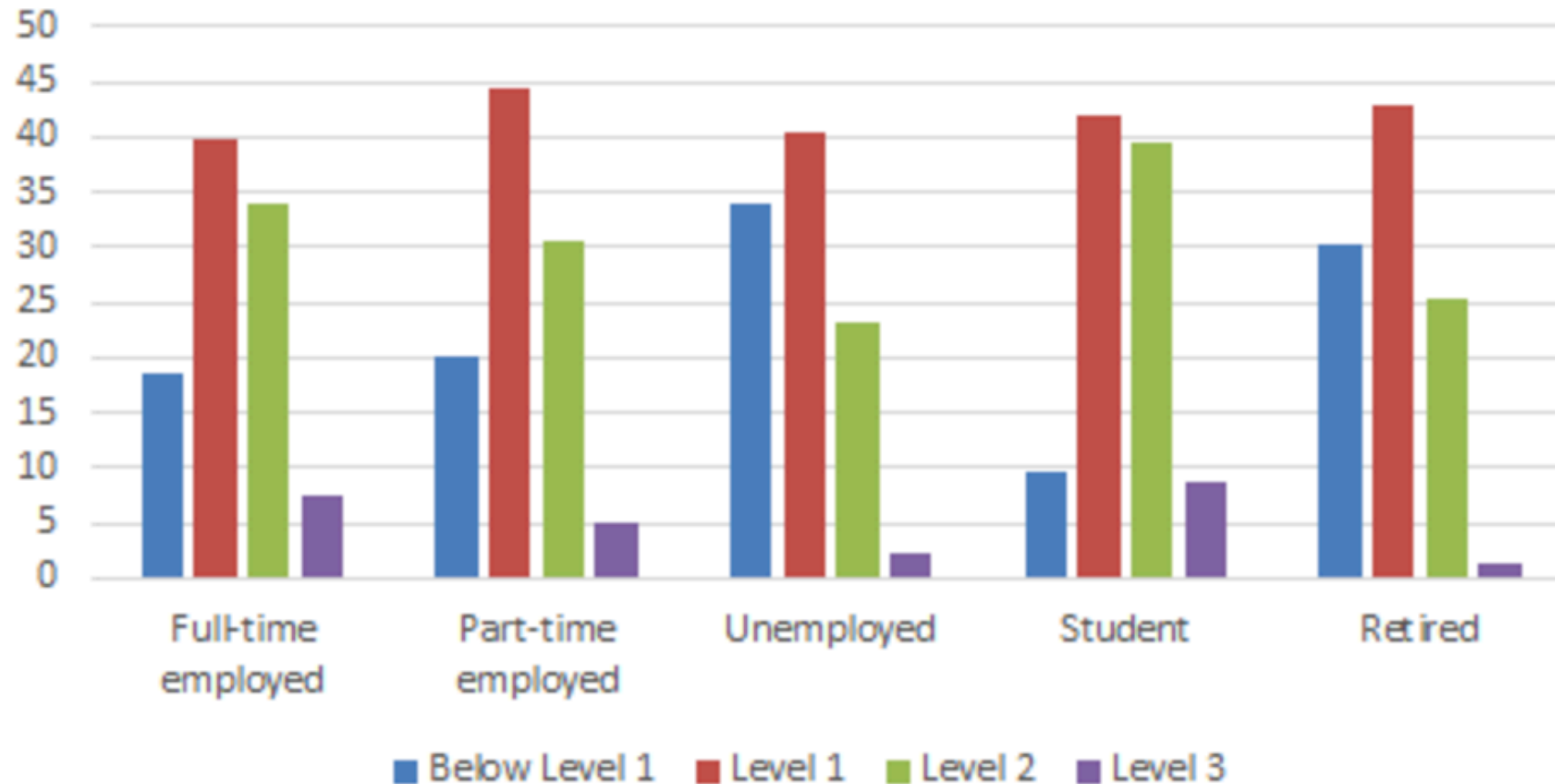
Most aren't as skilled as they think they are

Integrate skill building into what patrons' come into the library to accomplish



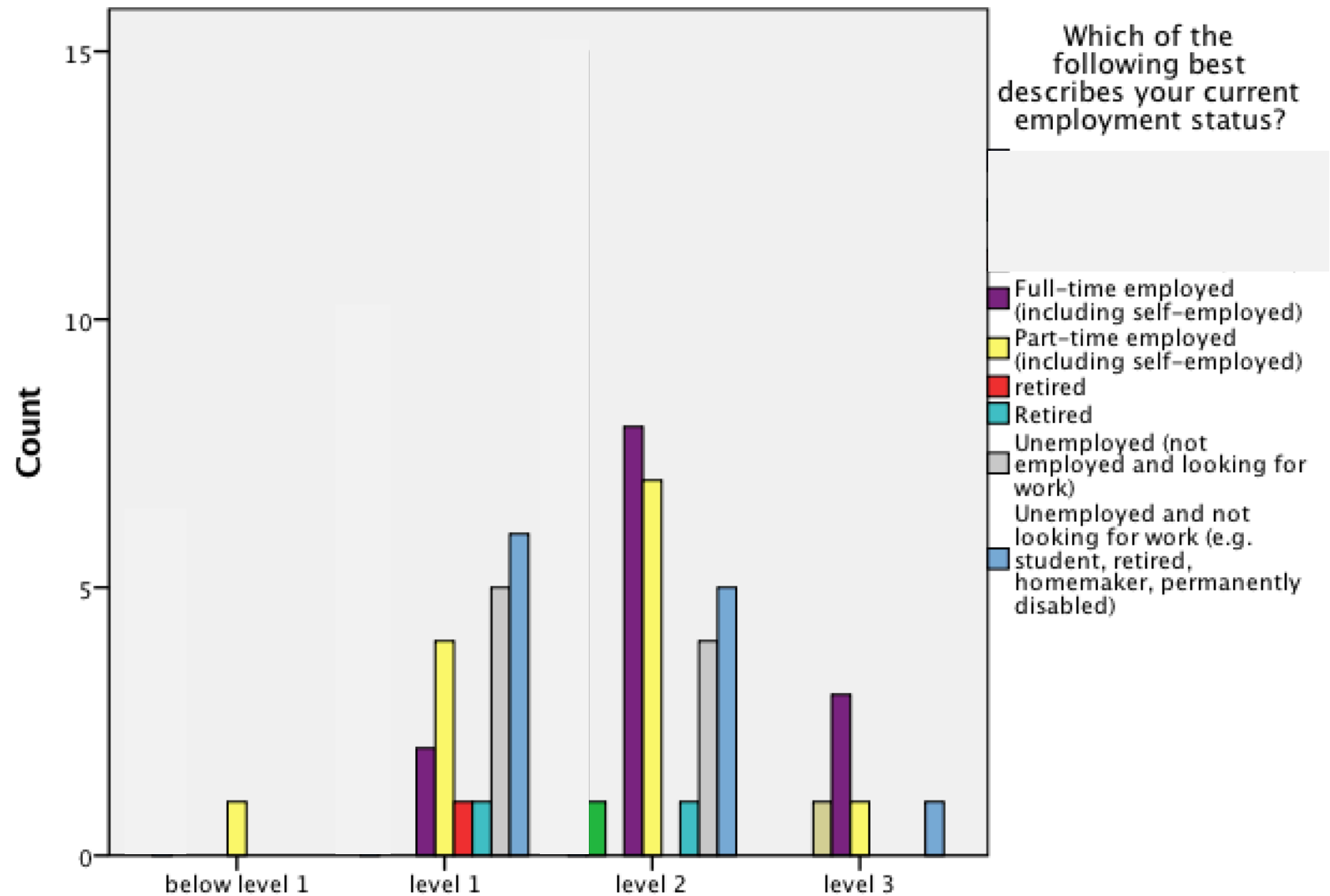
NATIONAL DIGITAL PROBLEM SOLVING DATA BY EMPLOYMENT STATUS

U.S. PSTRE Levels by Employment Status



EMPLOYMENT

Bar Chart

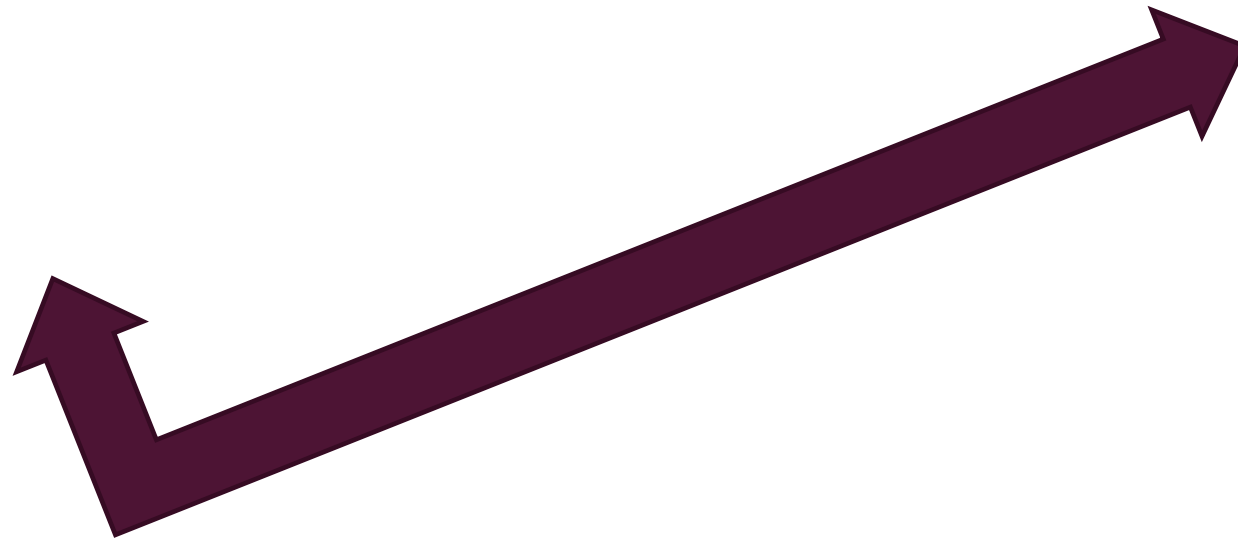


IMPLICATIONS AT THE LIBRARY

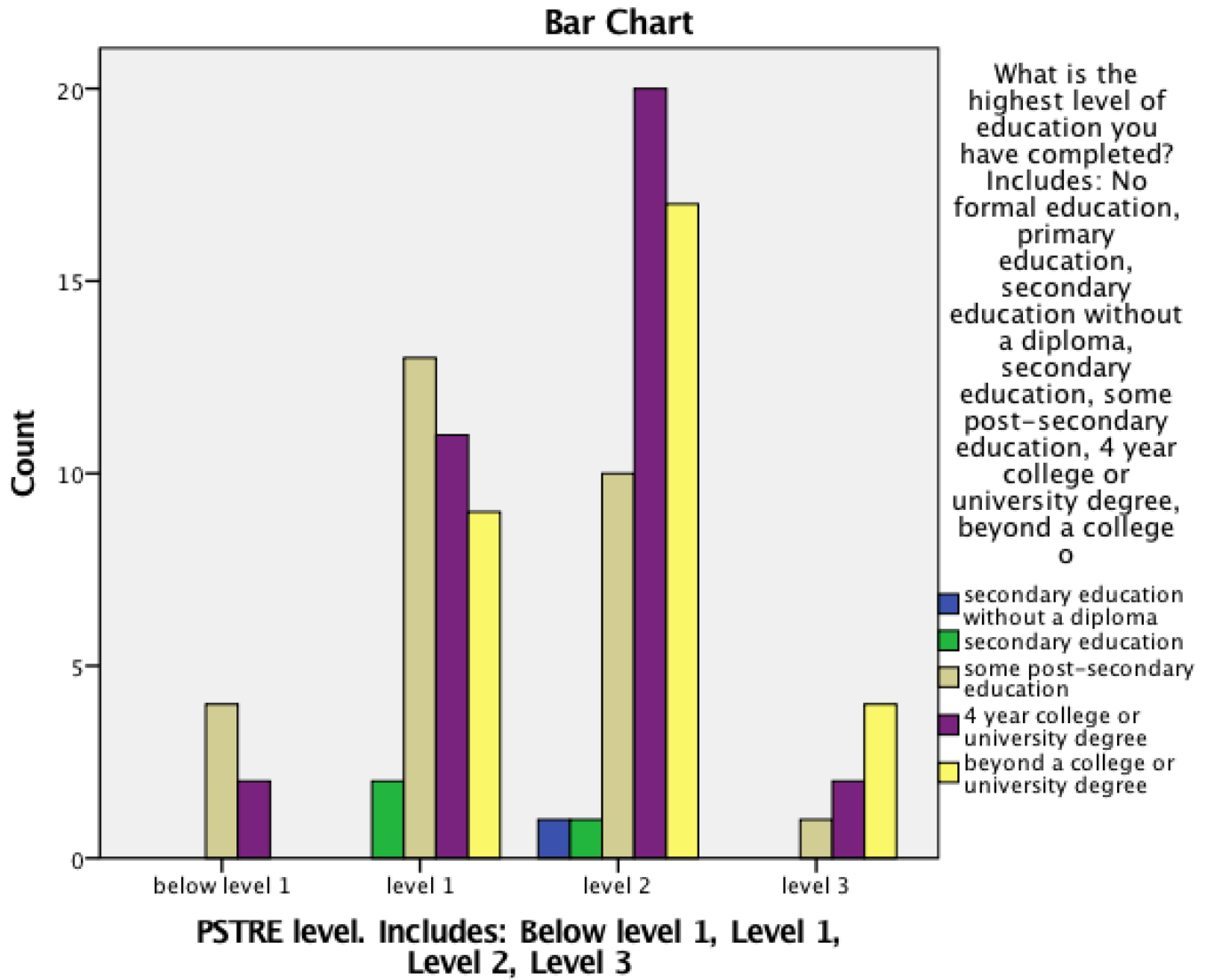
To Impact Employability

Digital problem
solving skills

Basic digital literacy



Education and PSTRE scores do not go hand in hand



WHAT THIS MEANS FOR LIBRARY PROGRAMMING?

Formal education
and/or completion
higher education
does not equal
strong digital skills

Provide interest-
driven learning;
opportunities to
use digital skills
and gain
experience



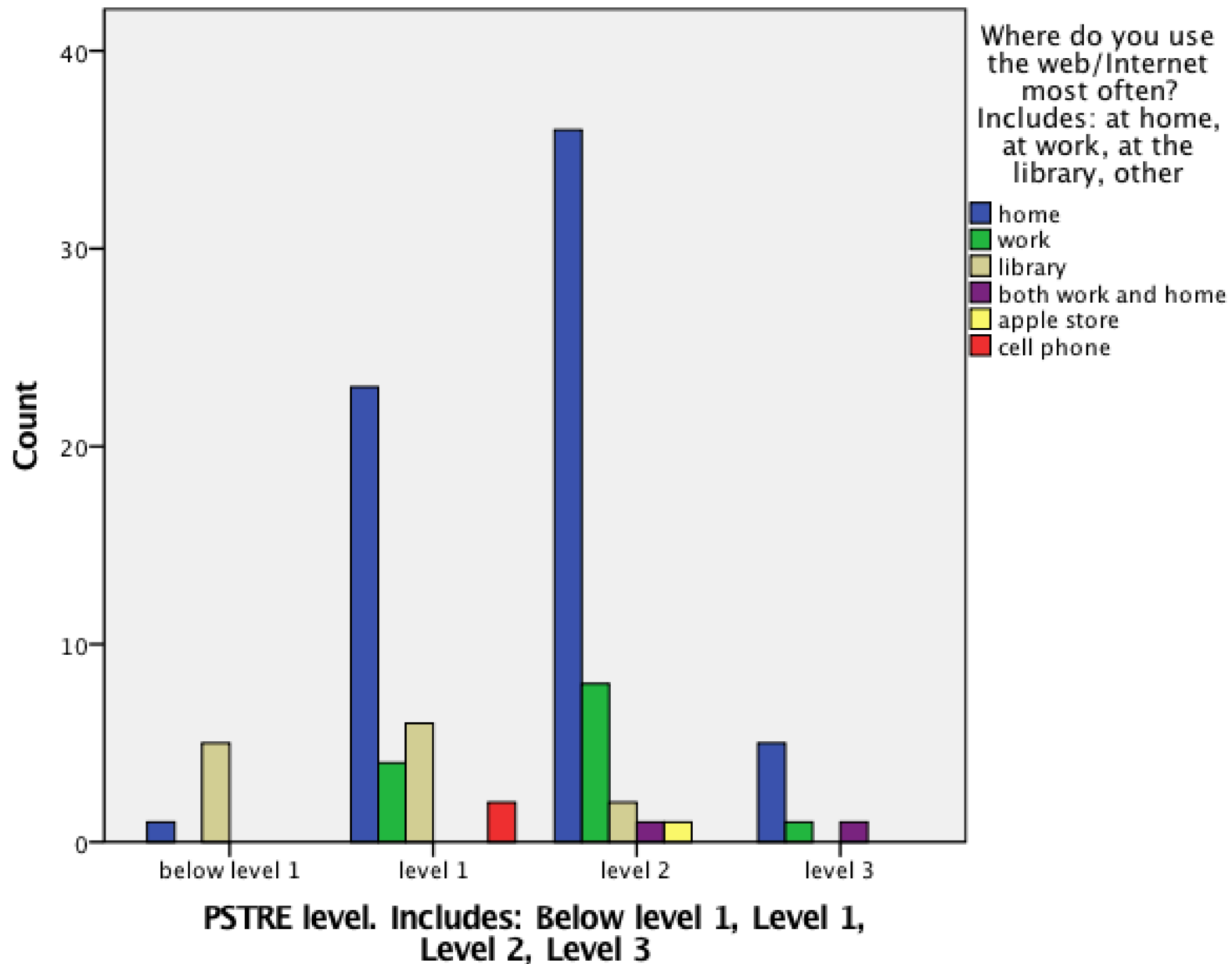
SUPPLEMENTS TO PIAAC DATA: OUR OWN SURVEY

Where do you use the web/Internet most often?

For example, Facebook, email, Trimet, Google, etc.

- At home
- At work
- At the library
- Other:

Bar Chart



Internet use location

IMPLICATIONS FOR LIBRARY PROGRAMMING

For patrons use the web/ Internet most often at the library

OR most often use their Cell Phone for Internet access

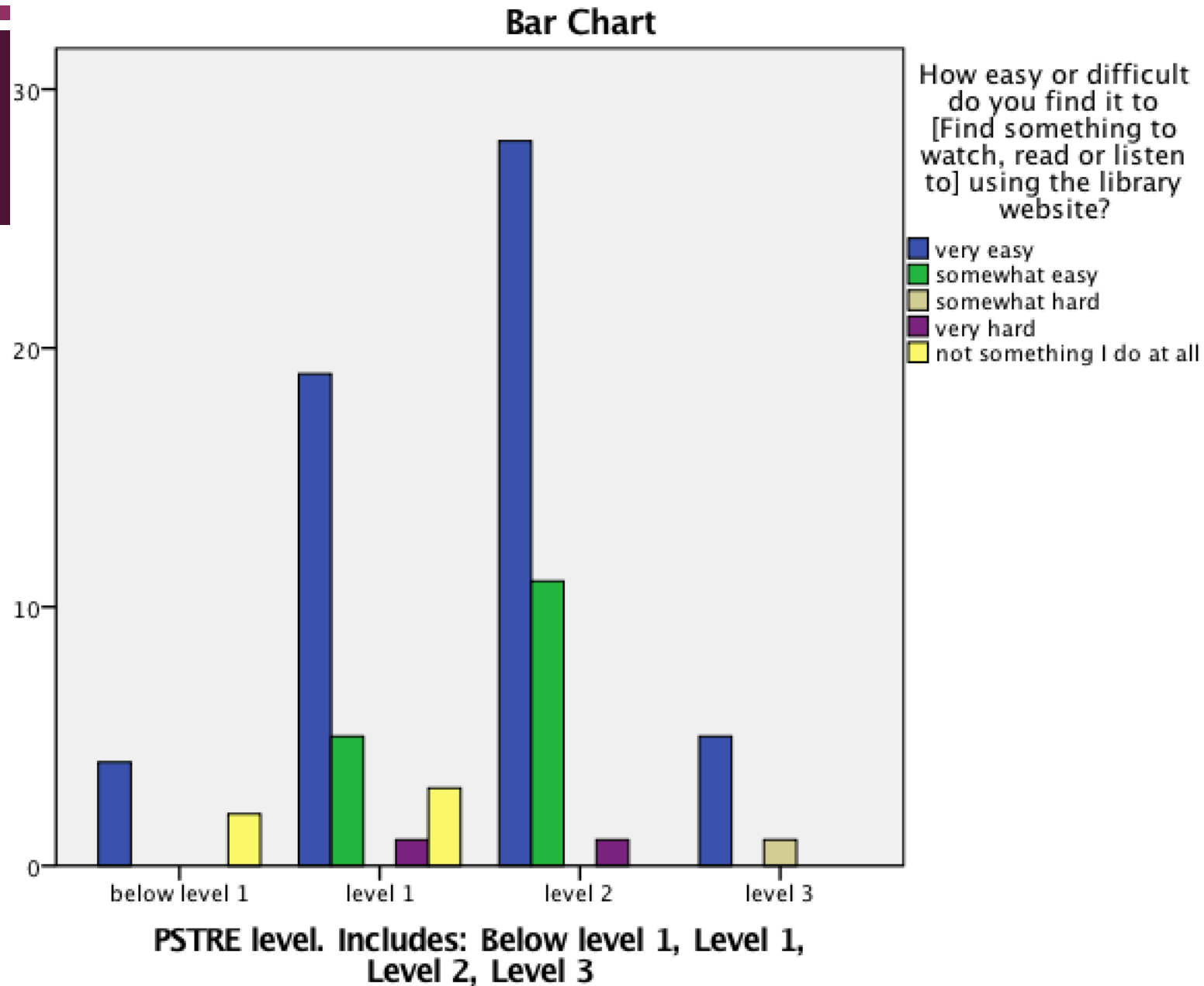


Provide Devices; supplement their access & give them more time

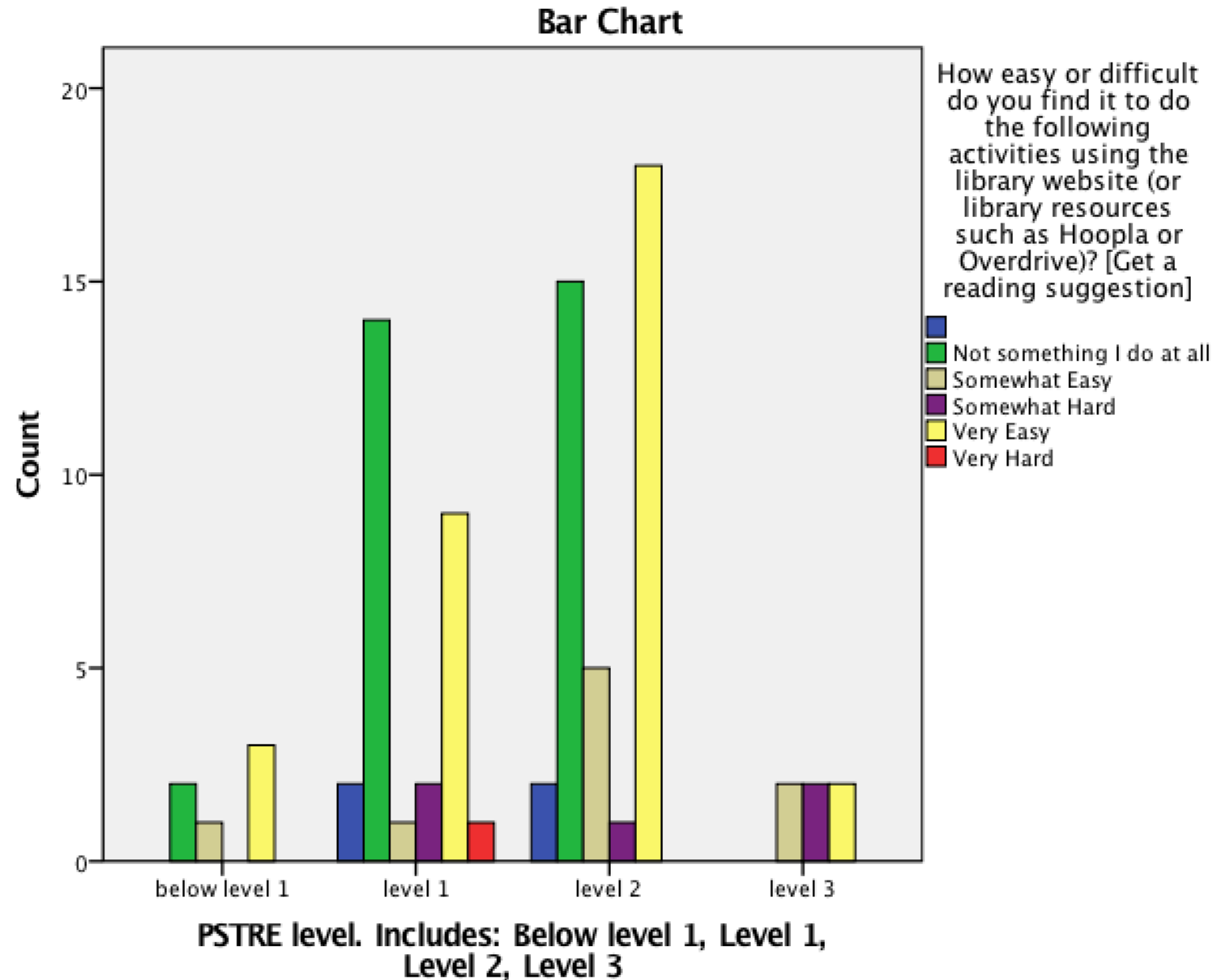
QUESTIONS WE'RE THINKING ABOUT?

What does a score at a certain PSTRE level imply about what that patron can and cannot do in the library using digital tools and interfaces?

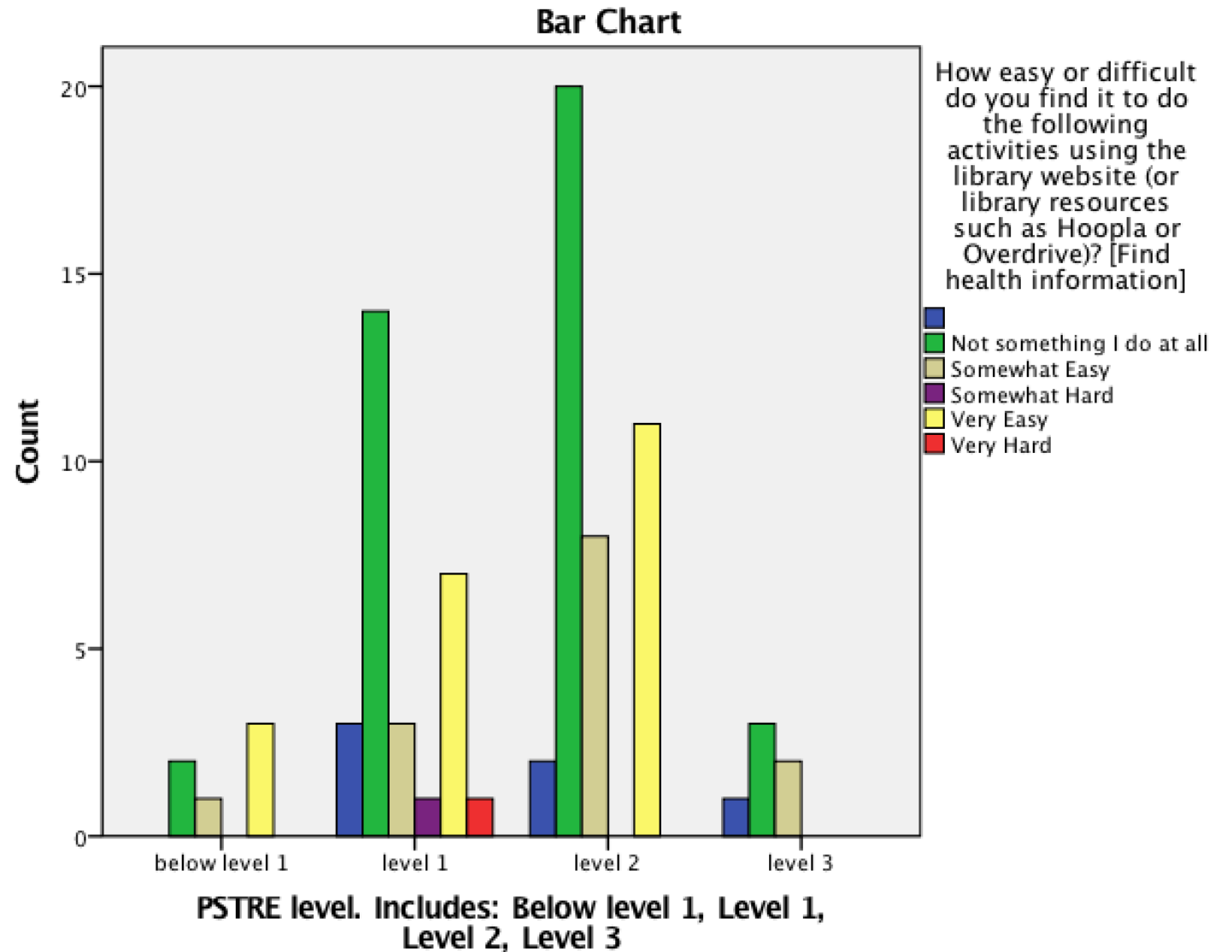
USE OF LIBRARY RESOURCES & DIGITAL PROBLEM SOLVING



USE OF LIBRARY RESOURCES & DIGITAL PROBLEM SOLVING



USE OF LIBRARY RESOURCES & DIGITAL PROBLEM SOLVING



WHAT DO THESE DATA SUGGEST ABOUT USE LIBRARY INTERFACES?

Do patrons know what the library has?

Patrons do not know ALL of what's available to them.

Can they Use what we offer them?

While patrons find things easy or somewhat easy, many still need help.

PLUGGING INTO YOUR COLLECTIVE EXPERIENCE

Discuss with a small group...

What do these trends mean for the tools you offer patrons?

What do these trends mean for the training you offer patrons?

What might this mean for the process you use to select vendors and online tools/products?

How can you make resources more accessible to patrons with lower skills?

What additional questions do these questions raise in your context?

STAY TUNED -- MORE TO COME

- Cindy Gibbon - cindyg@multcolib.org
- Jill Castek - jcastek@pdx.edu