

Empowering Educators in the Digital Age: Bridging the Professional Development Gap

Presented by: Leigh Davidson

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Who Am I?



Leigh Davidson

Professional Development &

Distance Learning Specialist

North Carolina Community College System Office



Based on research from Dr. Elizabeth Roumell and Sarah Haroon Sualehi (Texas A&M University), in which they explored the gap between student focused digital literacy efforts and the professional development offered by instructors.



Icebreaker

How Digitally Literate Are You?

Join Mentimeter to respond

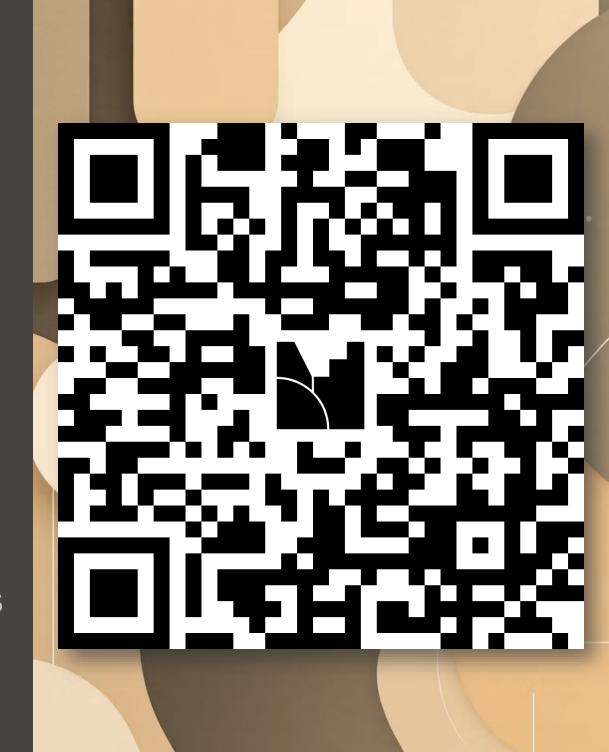
Scan QR Code OR

Join at menti.com

Use code 2462 2160

Share your honest perspective

Discover our collective digital competencies





Digital Literacy

Definition

"Digital literacy is the ability to access, manage, understand, integrate, communicate, evaluate and create information safely and appropriately through digital technologies for employment, decent jobs and entrepreneurship."

—UNESCO Institute for Statistics, 2018











Evaluate





Two Digital Divides

First Divide: Access

- Hardware is present
- Software is present
- Connectivity exists



Second Divide: Adoption

- Skills building opportunities
- Usage is encouraged
- Communal support





Am I a Digital Native because...



I have access to technology through personal and professional roles (re: phone, PC, laptop, wifi) and I figured out how to use them?

OR

I had regular professional development and training opportunities to build my digital skills, with communal encouragement from my peers and colleagues?



What happens when the digital world keeps turning, but we assume that digital skills learning will *just*happen?



Digital Literacy
vs Competency
vs Fluency?

What is it?

Literacy = Skills + Knowledge



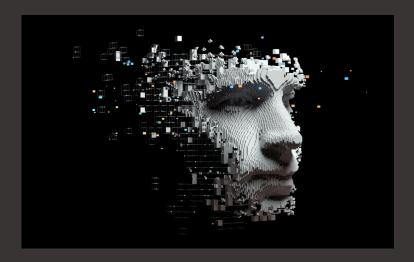
Access, Manage, Understand, Integrate, Communicate, Evaluate, Create

Competency = Skills + Knowledge + Attitude



Confidence,
Critically Engage

Fluency = Deep Knowledge + Mastery



Innovate, Adapt,
Critically Think,
Transfer/Evolve/Pivot,
Problem Solve





Some Basic Assumptions



Access

Everyone has the same access to digital technology



Andragogy

Everyone is able to self-teach digital skills



Adoption

Professional development is available, you just have to take it

Some Basic Facts

37%

Of the world has never used the internet

33%

Of US adults <u>do</u>

not have access to

broadband

51%

Of adults in the US are uncomfortable learning digital skills

68%

Of the digitally *illiterate*population in the USA are nativeborn adults



Are these your students...

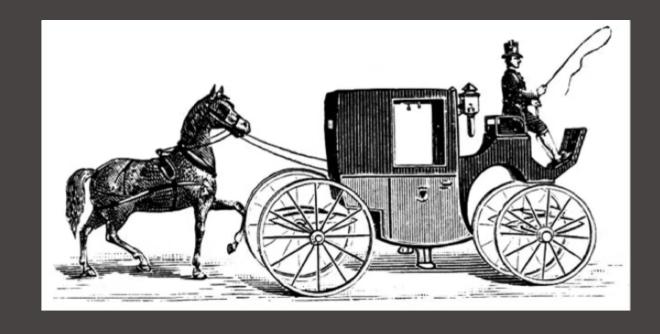
Your teachers...

Both?

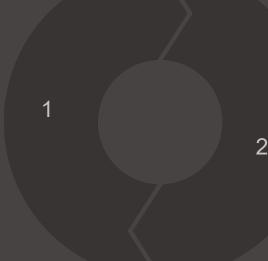




Not all, but for some teachers...



System Expectations



Professional Development

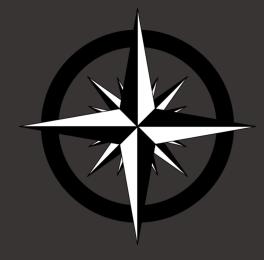




Barriers to Learning

Three Recognized Barriers to Adult Learning

1. Dispositional



Negative perceptions about ability to learn

"I'm too old to learn"

2. Situational



Conditions that limit ability to learn

"Work takes up all my time"

3. Institutional



Procedures & requirements cannot be currently met

"I am not eligible for PD yet"



Which Barrier Can PD Help Overcome?



1. Dispositional



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"I'm too old to learn"

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Simulation



Simulation

01

Current Role

You teach digital literacy modules: email, Microsoft Word, Excel

03

Your Task

Develop a 60-minute lesson on the basic "How-To's" for APIs as a software developer

02

Challenge

State-mandated career pathways program for software developers

04

Activity Instructions

Work with your group partners.

Ready... go!



Simulation: Debrief

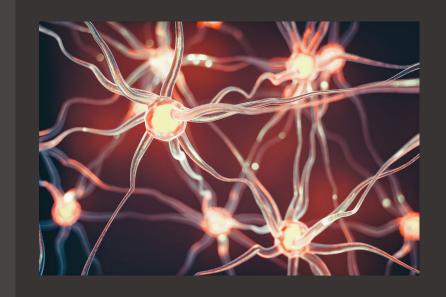
- How did that go?
- What helped you?
- What held you back?
- How did that make you feel?
- What could I have done to support you?



What's the difference if we ask teachers to develop and lead these digital literacy sessions without professional development support?

Professional Development improves teacher self-efficacy

Literacy = Skills + Knowledge



Access, Manage, Understand, Integrate, Communicate, Evaluate, Create

Competency = Attitude + Skills + Knowledge



Confidence, Critically Engage

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Lessons Learned

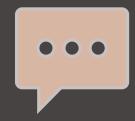


Technology for Connection

Necessary connections to plan for:



When we use tools to build meaningful connections and directly support desired learning, both content and technology skills development are supported.



And how does
Generative AI fit into
these considerations?





Things to Consider...



Psychological Safety

Is it safe for your teachers to admit when they don't know something?

Could it jeopardize their job?



Irony

Does your training already
require an amount of digital
literacy
(is it online or requires use of
an unfamiliar
application/platform)?



Honesty

Are your system expectations requiring digital abilities before digital training?



NC-Context

NC COLLEGE & CAREER REGISTRATE READINESS



Leigh Davidson

Professional Development & Distance
Learning Specialist

davidsonl@nccommunitycolleges.edu

Survey Questions

1) Useful Data

- How many of your instructors are full/part -time?
- How many of those instructors teach synchronous online classes?
- Does your program currently offer PD (digital literacy development for instructors and/or training on synchronous online instruction or instructional technology)?



Survey Questions

2) Local-Provider PD/Training

- Type(s) of PD/training provided to your instructors?
- Frequency of this training (monthly, quarterly, annually, instructor onboarding, as needed)?
- Effectiveness of this PD/training (to improve instructor skills & competencies)?
- How do you assess the impact of your PD/training on instructional quality?
- Any successful strategies/models to improve your instructors' digital competencies?
- Any recommendations to enhance PD/training for online instruction?



Survey Questions

3) Challenges & Future Needs

- Biggest challenges in providing digital literacy and instructional technology professional development to instructors?
- What specific digital skills or tools do your instructors struggle with the most?
- What types of professional development, or resources, would be most beneficial to your instructors?



Type(s) of Training

- Video-conferencing (e.g. Zoom)
- Use of specific tools & platforms (Burlington English, Nearpod, Canvas, Moodle Northstar, Newsela)
- Virtual classroom management
- Use of smartboard & collaborative platforms

Training Frequency

- Varies widely

 (quarterly, during onboarding, as needed)
- Some with no formal schedule OR
- Reliance on informal mentoring

Training Effectiveness

- Mixed responses
 3 or 4 out of 5
 Unsure
 Low effectiveness
- Programs with structured PD & instructor onboarding, external support (e.g.: vendor visits), and inhouse support (e.g.: digital navigators) reported higher success



Common Challenges

- X Instructor buy -in & time limitations (part-time)
- X Technology phobia or discomfort
- X Funding constraints
- X Lack of access to devices or reliable internet
- X Difficulty finding best practices for synchronous instruction

Instructor Struggles

- Navigating platforms
- Integrating tech meaningfully into lessons
- Managing hybrid or synchronous environments
- Learning new software or tools
- Engaging students virtually
- Stable connectivity

Successful Strategies/Models

- Techie Fridays: casual, low-stakes workshops
- **Digital navigators** : in-class support
- Vendor partnerships:
 e.g., Burlington English
 reps providing hands-on
 support
- Embedding tech into regular PD sessions





Role of the State Office???

- ✓ Pool resources across providers to offer joint PD sessions
 - ✓ Regional PD Consortiums
 - ✓ Professional Learning Communities (PLCs)
- ✓ Micro-learning opportunities (Rhode Island Tech Tuesday)
- ✓ Leverage the Digital Navigator Network (DNN)
- ✓ Prioritize training and technical assistance on high demand software

Coming Soon ...!

Teaching in the Digital Age Boot Camp



Survey on PD Offered on Online Instruction & Instructional Technology

Alamance CC

Beaufort County CC

Bladen CC

Brunswick CC

Caldwell CC & TI

Cape Fear CC

Davidson-Davie CC

Edgecombe CC

Lenoir CC

Martin CC

Mayland CC

McDowell Tech CC

Nash CC

Pamlico CC

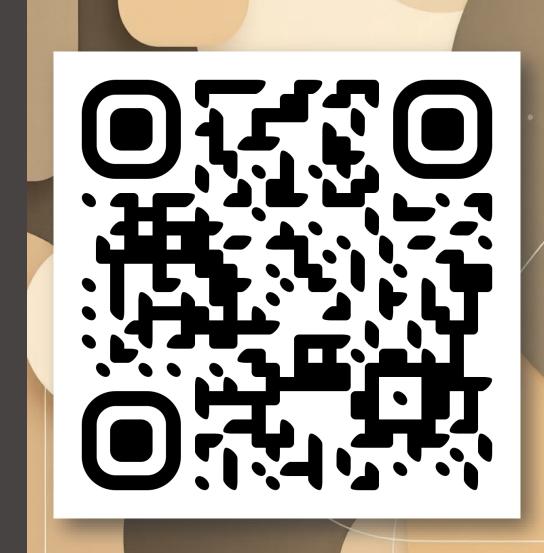
Rockingham CC

Stanly CC

South Piedmont CC

Southeastern CC

Southwestern CC





Endless Gratitude...

Dr. Elizabeth Roumell, earoumell@tamu.edu

Sarah Haroon Sualehi, sarah.sualehi@tamu.edu

- Castells, M. (2002). The Internet galaxy: Reflections on the Internet, business, and society. Oxford University Press.
- Cross, K. P. (1981). Adults as Learners. Jossey-Bass.
- Digital Literacy Resources for Educators, Employers, and Volunteers Barbara Bush Foundation.
- Digital US. (2020). Building a digitally resilient workforce: Creating on ramps to opportunity. Digital US Coalition. https://digitalus.org/wp-content/uploads/2020/06/DigitalUS-Report-pages-20200602.pdf
- Gilster, P. (1997). Digital literacy (1st ed.). New York: Wiley Computer Pub.
- ITU. (2021). Measuring digital development: Facts and figures 2021 ITU Hub. ITU Hub. https://www.itu.int/itu-d/reports/statistics/facts-figures-2021/
- ITU. (2022). Measuring digital development: Facts and figures 2022 ITU Hub. ITU Hub. https://www.itu.int/hub/publication/d-ind-ict_mdd-2022/
- Pew Research Center. (2023a). Demographics of Internet and home broadband usage in the United States. Pew Research Center: Internet, Science & Tech. https://www.pewresearch.org/internet/fact-sheet/internet-broadband/?tabId=tab-89fe9877-d6d0-42c5-bca0-8e6034e300aa
- Pew Research Center. (2023b). Demographics of mobile device ownership and adoption in the United States. Pew Research Center: Internet, Science & Tech. https://www.pewresearch.org/internet/fact-sheet/mobile/?tabId=tab-cf1ede57-7a4b-489e-8bcb-de1f4a6e643c