

# Promoting Digital Literacy for Adult Learners: A Resource Guide

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BARBARA BUSH  
FOUNDATION *for*  
FAMILY LITERACY



## About This Guide

The Barbara Bush Foundation for Family Literacy and Digital Promise are pleased to provide this guide to support educators, tutors, and mentors who are working with adult learners on building digital literacy skills. This guide has been developed to:

**Support coaching and mentoring for adult learners to strengthen and improve outcomes and learning retention**

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**Encourage users to consider the various motivations of adult learners in the design of mentoring strategies to best support them**

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**Integrate best practices and nuances of working with adult learners, especially in digital literacy**

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**Help users understand the specific skills and competencies of digital literacy, including basic, navigational, and connection skills**

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**Fill an existing gap in the professional development needs of adult educators, large employers, workplaces, and volunteers**

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We hope that this guide proves to be a useful resource for educators nationwide as they work to improve the quality and efficiency of adult digital literacy programs.

## About the Barbara Bush Foundation for Family Literacy

The Barbara Bush Foundation for Family Literacy has been the nation's leading advocate for family literacy for more than three decades. Established by former First Lady Barbara Bush in 1989, the Foundation is a public charity dedicated to creating a stronger, more equitable America in which everyone can read, write, and comprehend in order to navigate the world with dignity. To learn more, visit [www.BarbaraBush.org](http://www.BarbaraBush.org). 

## About Digital Promise

Digital Promise is a nonprofit organization that builds powerful networks and takes on grand challenges by working at the intersection of researchers, entrepreneurs, and educators. Our vision is that all people, at every stage of their lives, have access to learning experiences that help them acquire the knowledge and skills they need to thrive and continuously learn in an ever-changing world. For more information, visit [www.digitalpromise.org](http://www.digitalpromise.org). 

## Acknowledgements

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We greatly appreciate our partners at **Founders** [↗](#), who worked collaboratively with our stakeholders to compose, edit and design a guide of impeccable quality and lasting impact.



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● Chapter 1

# Overview

**Digital tools and technologies are no longer a luxury. They’ve become a central part of our personal and professional lives, and every adult deserves the opportunity to actively use them. It’s how we can all participate in today’s complex, increasingly connected world of technology.**

The **Barbara Bush Foundation for Family Literacy** [↗](#) and **Digital Promise** [↗](#) have partnered to develop, design, and launch this Digital Literacy Resource Guide for all those working directly or in small group instructional settings with adult learners. We aim to create a dynamic resource that will improve the quality, effectiveness, and comprehension of digital skills training.

Why is this important? Today, digital literacy is as fundamental to success in the workforce and in life as basic reading and math skills. Connectivity is more important than ever. Digital literacy involves skills in several areas, such as technical, civic, and collaborative<sup>1</sup>.

Adults need digital literacy “to access and operate internet-connected devices, to successfully use commonly available software, and to navigate and utilize online resources in order to effectively communicate and complete social and work-related tasks in a virtual space.”<sup>2</sup> Increasingly, Americans need digital skills for everyday activities such as making an

appointment; creating an online account; evaluating information for reliability; or using email, text, or social media to connect with family, friends, and communities.

Technological advances in automation and artificial intelligence are also changing society and the culture of work. To earn a living and navigate public and social systems, adults across all ages, races, genders, major industries, and most occupations need to continuously develop and apply **digital skills** [↗](#).

But equity in the rapidly changing digital economy remains a challenge. An estimated 30 percent of Americans—especially those with a high school diploma or less—will have to switch jobs in the coming years or develop the skills that employers are now seeking.<sup>3</sup> Adults may need to expand their capabilities or ‘upskill’ to pursue new career paths. This positions adults to thrive in today’s workplace and that of the future. There are tangible benefits, too. Those who develop new foundational skills earn more, provide more value to employers, and enjoy greater job mobility.<sup>4</sup>

### → **What is Digital Literacy?**

The ability and knowledge needed to access and operate internet-connected devices, to successfully use commonly available software, and to navigate and utilize online resources in order to effectively communicate and complete social and work-related tasks in a virtual space.

— Literacy Minnesota [↗](#)

### → **What is Digital Resilience?**

The awareness, skills, agility, and confidence to be empowered users of new technologies and adapt to changing digital skill demands.

— Digital Resilience in the American Workforce [↗](#)

Adults who possess not only digital skills but also **digital resilience**—“the awareness, skills, agility and confidence to be empowered users of new technologies”—are better able to adapt to changing skill demands, to problem solve, and to navigate organizational transformation efforts.<sup>5</sup> They are better equipped to participate in the economy, their community, and in family life.

“**Lack of access to technology and foundational digital skills training locks many people out of opportunities, with considerable costs to them and our wider society.**” [↗](#)



Building a Digitally Resilient Workforce: Creating On-Ramps to Opportunity.



**In this digital literacy resource guide, we seek to:**

Provide a clear understanding of digital literacy, including a breakdown of several types of digital skills such as basic computer skills, online reading comprehension skills, and digital literacy goals.

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Present research-based insights, best practices, and strategies for meeting unique learner needs, especially in digital literacy.

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Offer professional development to strengthen the confidence and capacity of instructors, tutors, and coaches in working with adult learners, especially in digital literacy.

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Digital literacy skills are taught across different scenarios, including adult literacy education and family literacy programs, workforce preparation programs, on-the-job trainings, libraries, corrections and reentry programs, veterans services, and corporate social responsibility initiatives. For that reason, this document is designed for anyone and everyone supporting adults with digital skills development.

Guiding others through their journey toward digital literacy is an incredibly important mission. From paying bills or conducting an online search to submitting time sheets or staying in touch with family and friends, being able to independently navigate new tools and technologies is critical for active participation in work and life. Expanding digital literacy skills has the potential to reshape communities for generations to come.

## **How to Use This Guide**

This guide is a support for educators, mentors, volunteers, and trainers, providing knowledge and strategies to encourage best practice in instruction. It serves as an accompanying document to a digital literacy skills curriculum of your choice. In addition, you may want to consider using this guide for professional development opportunities.

### Learning contexts can include:

- Adult literacy, secondary, and high school equivalency programs
- Adult charter schools
- Career service and workforce training programs
- Citizenship preparation
- Continuing education programs
- Correctional and reentry programs
- English language instruction and career-based **English language training** [↗](#)
- Enrichment and interest-based learning
- Faith-based programs
- Family literacy programs
- Higher education institutions
- Library education
- Online pathway exploration and/or **skills training** [↗](#) platforms
- Veterans services
- Work based-learning and apprenticeship programs

We recommend approaching this guide as you would an essential reference: start by reading the sections that you feel most closely align with your day-to-day work, and feel free to revisit the parts that are most meaningful to you. Consult the sidebars for field examples that will provide practical inspiration. Also, find quick tips and ideas to link theory to practice throughout this resource. The document is designed so that you can skip to experience each chapter as a standalone section. Sharing it with others is greatly encouraged!

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### Pause and Reflect

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Consider your purpose for reading this resource guide. How will it support your practice and how will it support your work with adult learners?

Review the Table of Contents. Is there a specific area you would like to learn more about? Set one or two goals for new key learnings and how you might apply this newly gained knowledge to your practice.





● Chapter 2

# Understanding the Adult Learner Experience

“ **Technology is always changing, so I really need these skills. I feel more comfortable with computers. I used to call and ask my kids all the time to help me use the computer, but now I’m independent!** If you don’t know how to fill out an online application, you need someone to help you, but now I feel like I’m the boss of the computer. Mothers want to be able to check their kids’ school progress, and if you know how to use the computer, it’s easy. You can follow your kids’ school progress online through their gradebook. ”

  
Northstar Digital  
Literacy Adult Learner

Adults are motivated to learn and develop new skills at work and in life.<sup>6</sup> They are committed to learning when they see value and practical advantages of gaining new skills—whether for personal growth or greater social mobility. Adult learners are more likely to live in multigenerational households and serve as caregivers for others in their families and communities. New **research**  shows that access to devices, broadband internet, and digital literacy instruction are priorities for today’s adult learners.<sup>7</sup> While adult learners want to use technology to meet their learning goals, many report the need for

more affordable childcare, stable housing, access to high quality healthcare, and livable wages.<sup>8</sup> They also have widely varying experiences with digital tools and technology.

Nearly **one out of three Americans** [↗](#) currently struggles to perform their job effectively due to limited digital problem solving skills, especially among people of color from both immigrant and non-immigrant backgrounds.<sup>9</sup> Adults earning low wages show less use of the internet for tasks like finding health or employment information.<sup>10</sup>

Research reveals that more than 50 percent of jobs that require a high school diploma or less are expected to be automated in the next decade.<sup>11</sup> In the years to come, adults may very well experience **many job transitions** [↗](#)—perhaps even a dozen or more by the time they retire.<sup>12</sup> But half of all Americans could become more confident using technology to learn, and greater access to and fluency around devices is part of the answer.<sup>13</sup>

“**With no end in sight for the rapid changes in work ahead, we are all at one point or another—whether we’re 18, 25, 45, or 65—going to have to rethink our path in life. We will come to a juncture at which we’ll have to upskill or retool ourselves through more education in order to keep up with the changing needs of our economy.** [↗](#)”

Michelle Weise,  
*Long Life Learning*

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Most Americans own a smartphone, including those with emerging digital skills. **Reliance on smartphones** [↗](#) for internet access is especially common among younger adults, people earning lower wages, and those with a high school education or less.<sup>14</sup> These individuals are more likely to need support with fundamental digital tasks such as those identified by **DigitalLearn.org** [↗](#) and the **Public Library Association** [↗](#)—from streaming television services to enrolling in a health insurance plan, registering a child for school, or attending a virtual event. When it comes to expanding digital literacy for adults, understanding why and how individuals plan to engage in their learning is essential to designing equitable learning experiences.

→ **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 equity requires not only supporting access to devices and internet service, but access to the education and skills needed to make use of these tools.<sup>15</sup> Adult learners approach learning with different goals, interests, cognitive abilities, and prior learning experiences. Adult learners today understand that digital skills and a **lifelong learning** [↗](#) approach are key to unlocking possibilities.<sup>16</sup> It is our responsibility as educators, mentors, volunteers, and trainers to support each individual in leveraging digital tools and technology to realize their potential.

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### Pause and Reflect

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Was there anything in this section that surprised you about adult learners?

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Identify an area you would like to learn more about — perhaps you would like to learn more about adult learners, digital equity, or how digital literacy skills may affect today’s jobs. Write one or two questions you still have about that area. Research the answers to your questions.

## What is Learner Variability and a Whole Learner Approach?

What is learner variability? It is a recognition that all learners differ, and that research guides us in understanding how these differences matter for learning. It embraces learners’ strengths and struggles.

Most of us have had school experiences that “teach to the average,” despite the fact that there is no average learner. When this happened, our motivation may have waned or it may have been more difficult to remember what we learned. Now imagine if your learning was designed to align with your interests, challenges, and strengths. That would be pretty motivating, right?

Much like their younger counterparts, adult learners possess widely varying content knowledge, cognitive abilities, social and emotional needs, and background situations. We call these categories a whole learner framework. When considering this along with the content that adults need to learn, education and training programs can use these factors to better target precisely what each learner requires to meet their potential. For example, adult learners may have a range of cognitive and physical traits, including memory differences or vision and hearing loss. Knowing how these differences can

impact learning will enable you to select appropriate supports, such as assistive technology, that would bridge gaps in their access to materials.

Understanding each learner’s variability across a whole learner perspective can help educators customize the learning experience to guide them to meet their potential. It also can enable us to create **culturally responsive** lessons, which can incorporate a learner’s culture and customs. We can create a more practical, individualized, and engaging experience by paying attention to who we’re guiding, and working to meet them where they are as learners.

### **Quick tip**

Taking time to get to know learners’ names and learning to correctly pronounce them creates a learning environment of respect and honors cultural identity. It is an important way to begin building positive relationships, which are essential to creating an environment where learners feel safe to take learning risks—like learning to use a new computer program!

#### **Consider these resources:**

-  Why Pronouncing Students’ Names Correctly is So Important | NEA.
-  Teachers’ Strategies for Pronouncing and Remembering Students’ Names Correctly | KQED
-  Top Tips for Remembering Students’ Names | Modern English Teacher

We are all a rich culmination of our lived experiences. And each adult learner brings important insights, knowledge, connections, and motivations from prior learning to each new opportunity. They are driven to learn and develop skills at work and in life. For example, some immigrant mothers are motivated to develop numeracy skills to support not only their own real world needs, but also their children’s math learning in school.<sup>17</sup>

## **How Do We Build Instruction That Understands Learner Variability in a Whole Learner Way?**

Building on individual life experiences is critical for deepening an adult learner’s understanding.

**“ Each of us [approach day-to-day learning] with very different experiences that we draw from to master content, create meaning, work in groups, share our voice, and achieve our potential. Understanding and addressing our differences will, in fact, help us be confident learners in school and beyond. ”**



Learner Variability is the Rule, Not the Exception

## → **Learner variability: better understanding personal hurdles and obligations**

In conversation with adult education providers, we heard that during the pandemic “some of the typical logistical barriers to retention and completion, like access to transportation or childcare, had become less burdensome as learners shifted to virtual classes.”

“The expansion of virtual learning in adult education **provides opportunities to connect with adult learners in new ways**. The concept of knowing your students takes on an entirely new meaning when instruction takes place virtually at kitchen tables, next to children who may be able to set up an internet hotspot or support with online course navigation.”

– The science of adult learning: Understanding the whole learner [↗](#)

There is no one-size-fits-all approach to guiding adult learners. Instead, focus on addressing the whole learner. You can do this by putting adults’ unique backgrounds, such as their personal motivations, content knowledge, cognitive traits, prior schooling experiences, and linguistic and cultural resources at the center of your instruction. We know, for example, that adults are more likely to persist in their education when strong social supports<sup>18</sup> are present, so programs that include mentoring or coaching may be more successful.

Adult learners also may be dealing with the negative effects of adversity or trauma, stemming from negative schooling experiences or social and political circumstances such as immigrating as a refugee.<sup>19</sup> Trauma-informed practices, such as building empathy for learners, can further help in developing a trusting relationship and reducing discomfort. When you teach using a learner variability approach, you make informed and intentional decisions about how instruction will be approached and made meaningful, and these decisions in turn lead to better learning environments.

### **LINKING THEORY TO PRACTICE** [↗](#) | 1

Getting to know the learners you serve and working to build a trusting learning partnership takes time! Check out our **Suggested Tools to Support the Whole Learner** and begin to uncover each unique learner’s digital literacy goals, strengths, and needs, as well as suggestions to build a welcoming, empathetic, and respectful learning environment.

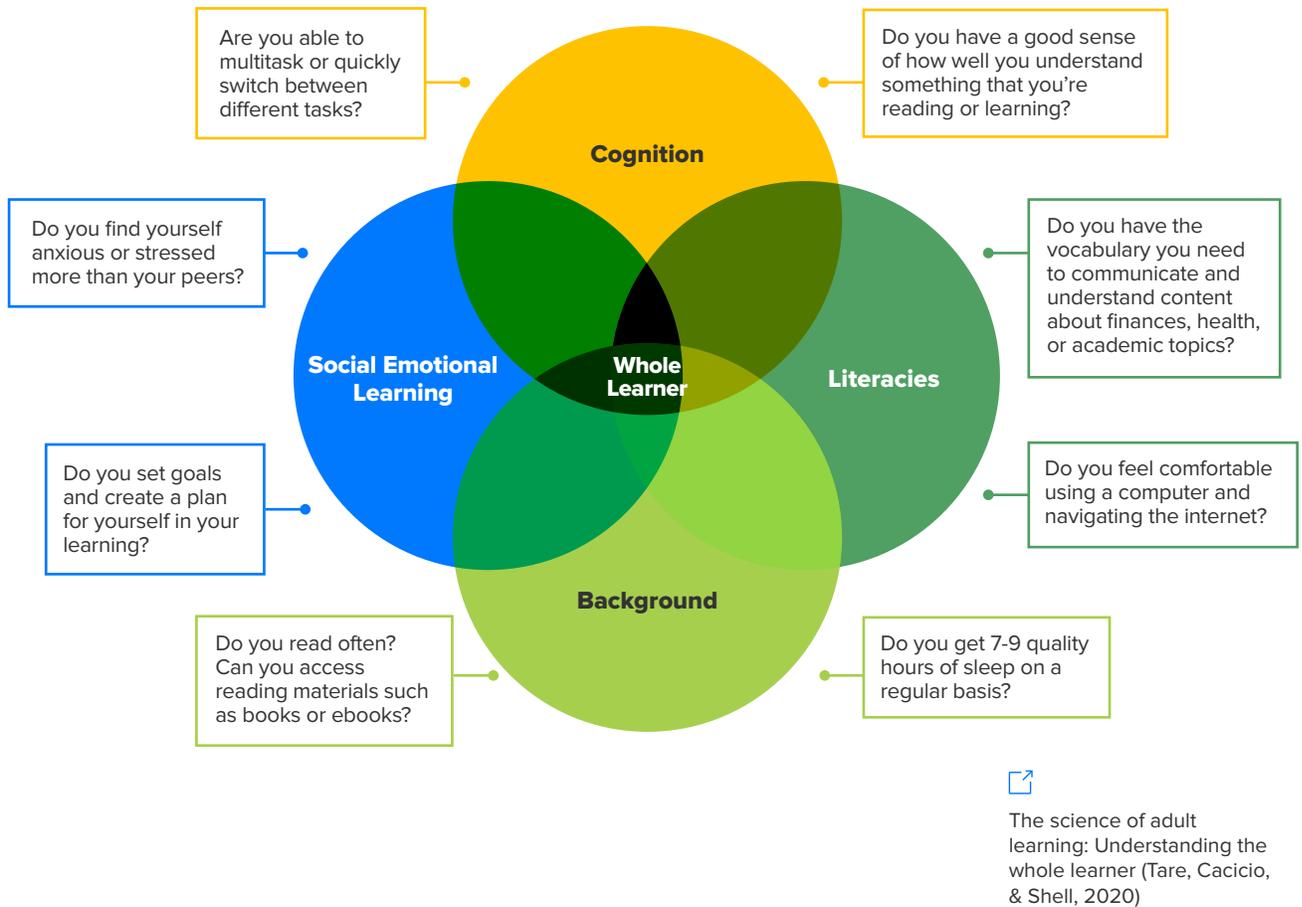
“**When we understand learner variability in this way, classroom challenges become a design problem, not a student problem.**”



Learner Variability is the Rule,  
Not the Exception



FIGURE 1.  
**FACTORS TO CONSIDER THAT MAY IMPACT ADULT LEARNERS**




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**Pause and Reflect**

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Consider the questions in Figure 1 that reflect the whole learner. How would you answer these about yourself? How do you see these factors varying among your learners?

When in your education did you benefit from instructors tailoring some aspect of their lesson to your experiences or needs? When could you have used more support?



● Chapter 3

# Defining Digital Literacy

**Take a moment to briefly consider how you use technology on a routine basis. In the pre-internet era, many everyday tasks, such as transferring money between bank accounts, might have involved traveling to a place of business, making phone calls, or writing and sending letters. A significant amount of time and effort was involved, and the world indeed seemed to have moved at a comparatively slower pace.**

Today, you might be able to accomplish those tasks in minutes or even in seconds. While you may take some of these things for granted, all of this is possible not only because the technology now exists, *but because you have achieved* digital literacy and are using it to your advantage. You either formally acquired these skills or managed to pick them up along the way.

Yet what feels like second nature to you now was once totally new. (This is probably something you still experience when you try out a new app or are figuring out privacy rules on a different platform.) So in order for you to guide others, you'll need to assume a beginner's mindset by putting yourself in their shoes. And for those who are on their way to digital literacy, it can feel like an increasingly steep uphill climb.

Digital literacy is much more intricate than we often think. It involves a **variety**  of skills and competencies. These include the **basic skills** needed to operate smartphones, computers, and other technological devices. It involves **navigational skills** to move within and between a range of software programs and digital applications, such as word processing software, email and social media, online games, and search engines. Additionally, it includes **connection skills** to communicate with others, interpret information, and develop an online reputation via social media.

Having these skills enables adults to accomplish personal and professional tasks. It also helps them to independently problem solve (known as **digital resilience**) if they run into roadblocks along the way. As you might imagine, digital literacy has a direct impact on many aspects of people’s lives, from finding possible job opportunities to managing a household to supporting family members in their health, educational endeavors, or their own journeys using technology.

What does digital literacy look like in practice? A person who is digitally literate can:

→ **Understand graphic design and navigate interfaces**

(PHOTOVISUAL LITERACY)

Knowing where to look and to click to move around within a website or application, for instance, starts with this basic understanding.

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→ **Create multimedia works**

(REPRODUCTION LITERACY)

This might involve editing a photo, making an invitation, or publishing a video with subtitles or emoji characters.

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→ **Navigate the internet to find what they need**

(BRANCHING SKILLS)

Searching online for directions or a recipe, scheduling an appointment, or looking for news articles are just a few examples.

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→ **Process large amounts of information at once**

(REAL-TIME THINKING SKILLS AND WORKING MEMORY)

This might include reading a sequence of events or specific details in a story while simultaneously trying to grasp the overall meaning of the story.

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→ **Find, sort through, and evaluate information in order to use it**

(INFORMATION LITERACY)

This involves knowing what keywords to use when searching and being able to scroll through and choose from a list of options.

→ **Be a discerning, engaged consumer of information**

(DIGITAL CITIZENSHIP<sup>10</sup> [↗](#))

Understanding how to gauge the reliability of a resource, or to use the internet to engage in respectful dialogue with others are critical parts of being a digital citizen. Also, it is critical to understand the consequences of online actions and to know strategies to be safe online.

→ **Establish an online profile.**

(CONNECTION SKILLS)

This involves the ability to use social media, online application tools, and professional networks to communicate in work and in life.

**LINKING THEORY TO PRACTICE** [↗](#) | 2

Pre-assessing learners' digital literacy is an important first step in planning for instruction. Consider using the **Pre-assessing Digital Literacy Skills tool** to reflect on your own digital literacy within each competency, and interview learners to get a sense of the skills categories they will need the most support in. We are all lifelong digital literacy learners.

There are many factors that influence a person's digital literacy. Research supports that the following individual differences impact adult learners. Each of these are personal and can vary widely from learner to learner, though some are impacted by external issues such as societal or economic constraints and challenges. (Note that the popular concept of **learning styles** [↗](#) has not been validated by research.) Read on to learn more about how each one might affect the learners you're supporting.

 **Quick tip**

Taking time to reflect on your own experience building your digital literacy can be helpful to guide others. Consider journaling and/or discussing the following questions with someone.

- What strategies do you use to learn how to do something that is new for you on a device?
- How did you build most of the digital skills you have now?
- What digital skills would you still like to build?
- How do you plan to build those skills?
- Can you think of an example of a time when you used your digital resilience?



## ● Foundational Skills



### Reading comprehension

Digital literacy draws upon other foundational skills. For example, your offline **reading comprehension**  skills contribute to your ability to navigate digital texts.<sup>21</sup> Much of the internet is experienced through the written word. This is the case even with videos, where subtitles are frequently present. If you can fluently understand information that you've read in a book or a manual, you're naturally more likely to be able to do so on a computer or mobile device.

Yet literacy, vocabulary knowledge, and reading fluency should not be assumed: approximately one out of every five adults in the U.S. struggles with basic literacy skills.<sup>22</sup> This may include the person you're guiding. Navigating this as a mentor or instructor requires empathy and sensitivity, and might require some adjustments to your method of teaching or tutoring.



#### Quick tip

Digital texts are often dense and require a higher level of reading comprehension. Depending on the needs of the learners you serve, consider adding reading comprehension support to your digital literacy instruction.

 Check out suggested links and resources to support reading comprehension in the strategies section on page 44.



### Background knowledge

If a person has **background knowledge**  through consistent experience with technology, that also enhances their digital literacy skills—particularly navigation skills.<sup>23</sup> Think about it: if you have used one search engine successfully, you'll likely have a sense of how to navigate a new one. Or if you've ever operated a laptop, even if a technical feature has changed, such as going from a mouse to a tracking pad, the principles you have used remain the same: moving your hand or your fingers to enable an action on the screen.

A graphic designer might have specialized but limited experience creating drafts in an industry design program that could be translated into using other software programs. Consider what real-world scenarios might be motivational for a learner based on their background knowledge, and give them the opportunity to share their understanding with others through mentoring or coaching, which further builds social support.

 **Quick tip**

Planning a warm-up for each class or tutoring session you guide can be a great way to uncover skills learners have and those they're still working on. Here are two adaptable ideas for digital literacy warm-ups to assess learners' background knowledge and help learners build digital literacy skills through read-world scenarios.

- 1 Internet Scavenger Hunt:** Learners work in pairs or small groups on one device. Pose a question, or ask learners to come up with one. Everyone searches online for the answer/s. Share together as a class.
- 2 Navigation Skills Transfer:** Learners work in pairs or small groups on their smartphones. Ask learners to try a skill they have learned to do on the computer on their smartphone or vice versa. For example, sending an email or visiting a website. Reflect together. What were the challenges? What was the same? What was different? What digital literacy skills did you use? What will these skills help you do?

## ● Thinking and Processing



### Cognitive flexibility

How adaptable we are in terms of our thinking also impacts digital literacy. If we have **cognitive flexibility** [↗](#), for example, we can shift from past situations and adjust our thinking (and actions) to suit current scenarios, and we can switch between concepts and tasks more easily. Adults do this often, whether they're working with others or with technology. In a digital sense, anyone who has clicked a link to open a new browser tab or window has had the experience of moving between multiple sets of information, which exercised this skill.

As our lives get noisier with ever more channels and information to consume, we are less able to concentrate. Multitasking is a cognitive drain outside of the digital realm, and it turns out that switching between multiple forms of media at once—think reading a PDF, viewing a video, and then skimming a website—also has adverse effects on our ability to process.

Research shows that adults who engage in heavy media multitasking have demonstrated difficulty with task switching online.<sup>24</sup> Filtering what's relevant from what isn't becomes a challenge for adult learners.

Our level of cognitive flexibility also changes how we seek out information on the web. You may search for a specific topic using a single or a few keywords, for example. But people of various ages show differences in information search online. For older adults, these are likely the result of age-related decline in cognitive flexibility, as they have been found to use a larger number of search terms.<sup>25</sup>

## LINKING THEORY TO PRACTICE | 3

Digital literacy is developed through practice. For mastery, learners need dedicated opportunities to experiment with new skills on the computer. Building in opportunities for learners to try new skills with a partner supports learners in building their capacity for problem solving and asking for assistance from teachers and peers. Through experimenting on a device, learners are building their confidence to try a skill on their own. Allow learners space to explore digital literacy skills with a partner without step-by-step guidance from the teacher. Check out the Northstar Digital Literacy **How to Facilitate Pair Explore** guide for language and tips to support learners to develop their cognitive flexibility and digital literacy resilience.



### Working memory

**Working memory**  is a tricky thing; you might consider it as the ability to hold two things in your mind at once. Think of the last time you had to remember an address to a place you want to visit, and then simultaneously absorb the directions to get there. You're temporarily holding something (the address) while processing another piece of information (the directions).

Working memory is related to the ability to comprehend digital texts, particularly within academic settings.<sup>26</sup> Overloading working memory can be taxing for anyone, including adult learners. Our capacity begins to decline between the ages of 35 and 40; prioritizing what is to be learned and focusing on an individual's strengths help to lessen the effects of this decline.



### Quick tip

Incorporating strategies to improve memory into your instruction benefits all digital literacy learners. Here are two adaptable ideas to support learners to build their working memory:

- 1 Ask learners to summarize what they learned to you or a classmate. Explaining information to someone else helps with understanding and helps learners to remember what they have learned.
- 2 After you model and explain a new digital literacy skill, give learners the opportunity to try it on a device. Experiencing learning through touch and interaction assists memory better than just listening.



This article shares more teaching strategies to improve memory: [How Memory Works | MN ABE Connect](#)



## Visual processing

**Visual processing** [↗](#) goes well beyond our sight. It is the ability to make sense of what we see—that is, to identify different elements, put them in order, and determine the relation of one to the other. It also involves our hand-eye coordination, a skill we’ve been honing since grade school, if not earlier.

Introducing visual examples to learners, through graphics or videos, is particularly helpful with visual processing, as is supporting and guiding learners through one-on-one instruction. Keep in mind that individuals diagnosed with dyslexia may have difficulties navigating websites, due to visual processing difficulties.<sup>27</sup> Font size and style, spacing, and color all play a role in how people with dyslexia and other learning challenges experience websites and other materials.

### Resources

World Education provides resources to assist digital navigators and instructors to help learners navigate accessibility tools and features.

#### DigitalUS Accessibility Resources



Minnesota Adult Basic Education Physical and Nonapparent Disability Assistance (PANDA) provides a list of assistive technologies to support learners with vision impairments.

#### PANDA List of Assistive Technologies [↗](#)

- Explore these resources to increase your own familiarity with assistive technologies available for learners.
- Share and try these resources with learners who may benefit from them.

## ● Feelings and Relating



### Social and emotional learning

Technology as we know it is so much more than hardware and software. It is ingrained with **social and emotional experiences** [↗](#): the plug-and-play digital picture frame given to a grandparent; the new, overly complicated (or far too simplistic) TV remote; the many detailed websites that update us on weather forecasts and world events; and the social networks that display the daily life and recent activities of our loved ones.

It's understandable that adult learners with prior negative experiences with technology may experience higher anxiety when using computers,<sup>28</sup> feeling that they won't be able to figure out how to complete a task, or (worse) worrying that they may break something in the process. Positively reinforcing adult learners and providing one-on-one support as they learn new skills or accomplish a task can help to build their confidence and reduce anxiety.

Instructors and guides should also be conscious of their own potential biases when assisting adult learners. For example, in a 2016 study, younger adults expected to have less success helping older learners with digital literacy skills, likely due to stereotypes of older learners.<sup>29</sup>

Those for whom English is a second (or third) language may be stereotyped as having low digital literacy—meanwhile, they may have a higher digital literacy level or capability, but it's in a different language. Making assumptions or judgements about a learner can be harmful in the long run, as it alters the way you teach them and impedes their progress.



### Quick tip

Instructors set the tone in the learning environment. Here are some ideas and language prompts to build learners' confidence in the digital literacy classroom.

- 1 Set one or two learning goals together at the start of every lesson.** Ask learners: What is/are our goal/s for today? Possible answer: We will be able to log in to an email account and send an email.
- 2 Check in at the end of the lesson.** Ask learners: Did we meet our learning goal/s? What will we want to practice more next time? What can you continue to practice on your own?
- 3 Acknowledge success through specific praise.** Say to learners: I can tell you have put a lot of time and effort into learning to send emails. I noticed you sent me an email today. I'm excited to reply! Learners see through false praise, so be sure to acknowledge success when it is authentic.
- 4 Acknowledge and communicate with learners the importance of mistakes in the learning process.** Say to learners: We all learn to do new things on the computer by trying, failing, then, trying again! Mistakes are an important part of the learning process. They help us know what works and what doesn't. Making mistakes helps us learn! Don't be afraid to make mistakes.
- 5 Communicate and connect with learners using technology.** Ask learners: What platforms do you currently use? WhatsApp? Gmail? Share updates about assignments and class

To this end, adult learners may have something in common with younger students. Research has shown that **teachers' expectations can influence student performance** [↗](#); <sup>30</sup> if those who are supporting adult learners show confidence in them as learners, it could help them to build new skills as well.



## Social supports

As with all learning experiences, community counts. Learning how to use technology shouldn't be done in a vacuum, especially for those adults who have little experience. Adults with emerging digital literacy abilities may benefit from **social support communities** [↗](#) when using the internet.<sup>31</sup> That community might include their family, colleagues, and friends, and it most definitely includes you. Providing helpful feedback, information, and advice, as well as showing compassion for the learner, are all ways in which you can support them.

Consider how the adults you're guiding might be able to support one another as well. Could they relate with peers in similar situations, either in real life or online? Such interactions offer encouragement, boost learner confidence, and create further motivation to continue, as learners understand that others are encountering challenges and frustrations similar to their own. They can also cheer one another on, celebrating 'small wins' toward bigger progress.

through a classroom website, WhatsApp group, or email. Communicating with learners using tech tools can help build confidence through practice.

### Here are more tips for supporting learners' confidence in the classroom:

- [↗](#) Building Student Confidence | NEA
- [↗](#) 5 Strategies to Help Boost Your Students' Self-Esteem and Confidence in the Classroom | Edmentum
- [↗](#) Digital Skill-building by Design: The EdTech Integration Strategy Toolkit



## Quick tip

Taking time to celebrate progress can give a boost to learner confidence and motivation. Here are two ideas to acknowledge and celebrate progress toward larger goals:

- 1 Words of Encouragement: Take time to write a short note recognizing a small win a learner had. Jot it on a sticky note and give it to the learner, or place it on the computer before you meet. If you meet virtually, try emailing or chatting words of encouragement.
- 2 Self-Reflect on Accomplishments: Set aside time for learners to self-reflect using the questions below. Remind them that small wins count! Share and reflect together.
  - What can I do now that I could not do before?
  - What digital literacy skills am I good at?
  - How will I celebrate my small wins with my friends or family?
  - How does celebrating my small wins feel?

- [↗](#) The EdTech Integration Strategy Toolkit | EdTech Center @ World Education includes more resources to reflect on and assess learner progress.

## ● Personal History and Experience



### Socioeconomic status

What stands in the way of greater access? Class differences continue to influence individuals' and families' digital literacy. Technological ability has historically strong ties to **socioeconomic status** [↗](#), or one's social standing, including family education, occupation, and income. Those who are from more affluent backgrounds may have received formal training earlier, are **more likely to be early adopters** [↗](#),<sup>32</sup> and are likely more financially able to invest in new tools and devices.

Meanwhile, those from lower socioeconomic backgrounds experience inequitable access to high quality education and training opportunities—and these circumstances often coincide with experiencing food, job, or housing insecurity. Earning lower wages is related to less frequent internet use for health information, especially for adults in racial minority groups.<sup>33</sup> Those who are less affluent are more likely to rely on smartphones for finding health, education, or government information, as well as job and employment resources, according to a **2015 Pew Research Center report** [↗](#).<sup>34</sup> As of November 2021, a reported **18 million American households have access to the internet but cannot afford to connect** [↗](#).<sup>35</sup> When designing learning experiences, it is critical to first find out how adult learners plan to connect and engage with course content.

Nearly every public library in the United States offers free access to computers and the internet, according to the **American Library Association's 2015 Digital Inclusion Survey** [↗](#). Libraries can be a good place to refer learners who do not have access to devices or the internet. Also, consider researching low cost computers and internet essentials in your area to refer learners to resources.



#### Quick tip

The vast majority of adults have a smartphone. Smartphones can be excellent tools to build digital literacy. Remote instruction is a great way to build digital literacy for both teachers and learners, and offering some opportunities for remote instruction often helps learners with barriers to attendance such as transportation or childcare. Here are some resources to plan for remote digital literacy instruction:

[↗](#) Literacy Minnesota Remote Tutoring Resources



## Language

Your **primary language** [🔗](#) also impacts your level of digital literacy. Imagine for a moment that you, as a person fluent in English, need to access the internet. No problem, right? But in this case, most of the internet has been written in a language totally unfamiliar to you. The words and sentence structure bear few if any similarities to English, and even basic tasks such as conducting a simple search seem daunting.

This scenario is analogous to the experience of many immigrants and refugees who didn't grow up speaking nor learning in English. Immigrant-origin adults (28% of working-age adults in the U.S.) need English skills for employment and navigating public and social systems. As English has become the de facto language of global business, adults with emerging English proficiency may find interacting with such content to be very challenging. For example, research has demonstrated that adults with limited English proficiency are less likely to use the internet for health information.<sup>36</sup>



### Supporting English Language Learners (ELLs)

ELLs have many strengths to build upon in their learning, including unique cultural and life experiences, which can lead to passionate discussion and engaging course content. Building connections to their backgrounds helps all learners feel that they are valued, and also aids in their retention of new material.

Multilingualism builds metacognitive skills that allow ELLs to reflect on their own learning at levels higher than their monolingual peers.

Check out this **educator testimonial** [🔗](#) for helpful strategies and practical tips to support English language learners.

Additionally, **Literacy Minnesota** [🔗](#) offers an educator resource library as a hub for all things ESL and Adult Basic Education. Access lessons, classroom videos, and tutor tips!

Also, bilingual and multilingual learners can acquire new languages in different ways. A learner's first language may interfere with the recognition of new words and constructing meaning. Ultimately, adult learners' primary language and accompanying cultural knowledge should be considered important **background knowledge** [🔗](#) that can further support skill building.

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### Pause and Reflect

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Think about something you learned in this section. How can you use this new knowledge to support your learners? How will you apply this new knowledge when interacting with your learners or creating learning activities for them?

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Identify areas that are still challenging to you and develop a plan to learn more on these topics.





● Chapter 4

# Preparing to Teach Digital Literacy

**It's clear that digital literacy involves a truly fundamental set of skills—one that can improve the lives of every individual. In a typical day, the average adult spends around 11 hours [📄](#) looking at screens, including smartphones, computers, and tablets, often without even realizing it.<sup>37</sup>**

Within this period of time, they may be attempting to accomplish many different tasks, whether those are personal (checking messages from a child's teacher or depositing a check online) or professional (responding to an email or searching for work-related information).

How can we help adults learn how to effectively navigate digital spaces, even as they're constantly evolving? And how can those supporting adult learners create helpful, equitable instruction that addresses their needs and concerns?

**Learner needs > Technology and tools**

Keeping people **at the center of your training efforts** [↗](#) is crucial. Putting the learner at the heart of instruction prevents them from feeling misunderstood or disenfranchised.

First and foremost, instructors should understand that most adults are interested in **practical outcomes**. They need to know what to expect before beginning their learning journey and be able to offer input along the way. This can help to keep them motivated even during those times when confusion or discomfort may set in.

**Adults must see the benefit of learning tasks to fully engage.** Adults are independent learners who likely have multiple priorities, of which learning is just one; they may have complex reasons for creating and working toward learning goals.

**Engaging in lifelong learning activities is also interconnected with general well-being.** Having greater emotional, cognitive, and **physical well-being** [↗](#) can positively impact learning; in turn, engaging in learning can improve adults' life satisfaction. It also can have an impact on their income, relationships, and influence in broader society. Remember that your work guiding adults has wide-ranging and potentially long-term implications that go well beyond acquiring new tasks/skills.

## Building Digital Capacity at Work

Digital literacy training can happen on the job as well. You might have attended some of these scenarios at some point in your career; they could include lunch and learn sessions, internal certificate programs, and hands-on instructional sessions, among other approaches. Staff may need to acquire a variety of technical skills. These could involve more advanced **competencies** [↗](#), which might be familiar to you:

- the ability to collect and analyze data;

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- knowing how to develop requirements for technical solutions based on user needs; and

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- knowledge of how to **select and evaluate technologies and tools** [↗](#) on the basis of functionality, ease of use, flexibility, interoperability, security, privacy, or scalability.<sup>38</sup>

Organizations that seek to become more inclusive often start by building their workforce's own digital capacity. Addressing any gaps in skills in both practical and memorable ways can help adult learners to succeed, while enabling organizations to visibly live out their mission.

Companies benefit directly, as digital literacy can **increase employees' engagement** [↗](#).<sup>39</sup> Employees are more likely to develop both industry-specific and **transferable skills** [↗](#).<sup>40</sup>

## Key Considerations for Supporting Adult Learners

Every learner is unique in terms of their motivations and limitations. Avoiding any assumptions from the outset will be very important, as assumptions may influence your instruction. Below are some tips to keep in mind as you approach this important work.

→ **Access to devices and the internet isn't universal.**

Those whom you're guiding may or may not have access to a computer or to broadband internet at home. (As of 2019, 30% of households in 185 large and medium-size U.S. cities **lacked a wireline broadband connection.** [↗](#))<sup>41</sup> Help learners find free or **low-cost internet access** [↗](#) or **computers** [↗](#), and make these resources available to everyone.

→ **Explore mobile-friendly and offline lessons.**

The vast majority of adults (95%) have a smartphone. Find out what devices adult learners plan to use or design lessons that are mobile-friendly and device-agnostic to ensure that everyone can benefit from them. Also consider finding creative ways to provide internet access (through a hotspot or other tethering, or a public WiFi zone). Lastly, don't overlook the ability to work offline in a certain program when needed, as that might be necessary depending on learners' access to connectivity.

→ **Flexible pacing works best.**

Consider, also, that many adult learners may have limited control over their time. With possible health challenges, others to care for at home, or inflexible work hours, adults are regularly dealing with competing concerns and constraints. Because of this, they need to have the ability to adjust the pace of their learning and to have ongoing access to lessons and tools so that they can revisit material when needed.

→ **You're learning as you instruct.**

Just as learners' needs evolve over time, so can the topics and technologies you decide to cover. Your approach to instruction should be iterative, in which you gather feedback from learners and then



### Quick tip

Here are several ideas to make lessons more mobile-friendly for learners accessing instruction via a smartphone.

- 1 Create a class website.** This way, learners only have to navigate to one site. From the class website, they can link to other learning resources you have posted.
- 2 Use a font size 24, or larger, on all slides.** Planning to create slides for your class? Be sure to use a large enough font size for learners to see the text on a smaller screen.
- 3 Try it.** Before you ask learners to access a specific learning website or tool, try it on your own mobile device first. Assess the screen interactions and view so that you will be more prepared to help learners navigate.

make adjustments or take small detours along the way. Learning experiences where adults serve as co-creators will ensure that they stay engaged, build relevant skills, and won't miss out on opportunities to share personal concerns or areas of interest.

→ **Let problems lead the way.**

Start by figuring out what problem they'd like help with solving. (This is referred to as **content-based literacy instruction**.) Maybe it's logging into a banking app, attaching photos to an email, or filling out a form online. Knowing what a learner wishes to accomplish should come before selecting the tools or technology that you plan to share with them. It also helps to prevent information overload, as you're selecting tools and resources to support practical skills needed in their day-to-day lives.<sup>42</sup>

**LINKING THEORY TO PRACTICE**  | 4

How can those supporting adult learners create helpful, equitable instruction that addresses the specific needs and concerns of each unique learner? Planning leads to effective instruction. Check out **Steps to Follow to Help Learners See Practical Outcomes in Digital Literacy** as a tool to get started.

## Getting to Know Adult Learners

Think about the varied experiences, aspirations, circumstances, and needs of the learners you're supporting. Take time to gather information about the whole learner, from reviewing intake materials or offering a brief survey to having a one-on-one conversation about their learning journey.

Asking these questions can help you tailor your approach to instruction:

- ① What do they hope to learn in this course or program?

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- ① What knowledge or experience do they bring to their learning?

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- ① What is their preferred language and/or mode of communication?

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- ① Are they serving as caregivers to young children or elder relatives?

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- ① Do they have access to affordable childcare or eldercare?

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- ① Are they working swing shifts or overnight shifts?



- ② Are they juggling more than one job?

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- ② Will their work schedules vary depending on the day or the week?

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- ② Do they have reliable personal transportation to attend instruction, or are they relying on public transportation?

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- ② Is there anyone they can seek additional guidance from at home or in their community?

A pre-assessment can also help you gain clarity on what digital literacy skills adult learners need to learn and how to adjust the strategies in this guide. Here are two resources you may consider to pre-assess learners' digital literacy skills.

The Maryland Department of Labor created a comprehensive list of **Guiding Questions** [↗](#) (see p. 18) that learners can respond to, or that those supporting them can draw from, modify, or assist them in answering in order to better understand what specific digital literacy skills learners need support in. Additionally, **Northstar Digital Literacy** [↗](#) provides free online interactive assessments.

Anyone can access these online assessments to identify skills mastered and specific skills to work on in topics like Using Email, Google Docs, and Internet Basics. Those guiding adult learners are encouraged to pre-assess their own skills in a topic prior to instructing others to see what areas of growth they may still have.

## Connecting With Communities

Learning with peers can help adults to feel less isolated. Whether it occurs onsite or online, learning can still happen within a community setting. To achieve this, some public organizations and nonprofits have developed collaborations in order to provide peer-to-peer learning experiences. Community-based organizations also have created technology training programs with access in mind. Below are examples.



### Quick tip

Taking time to get to know the learners you serve and the barriers they may have to attending class or tutoring sessions is valuable, as it will enable you to tailor instruction that more closely meets their needs. For example, you may be able to adjust the time you meet for instruction, whether instruction is given in-person or remotely, and perhaps the meeting location.

For other requests for assistance, be prepared to refer learners to navigators in the community who can best help them to remove other barriers they may have to attending your program. Learners can find local resources they need 24/7 by calling United Way 211, a free and confidential national service.

### Learning circles

Community organizations across the country offer a variety of supports for adults who wish to improve their digital skills alongside their peers. For example, the Chicago Public Library and **Peer 2 Peer University** [↗](#) hold lightly facilitated study groups for adult learners who want to take online courses together, in-person.

**Digital US** [↗](#) provides a detailed implementation guide for organizations to facilitate learning circles that develop learner agency and leadership skills through peer learning.

### Mobile learning

Programs created for anytime-anywhere smartphone usage can reach the majority of adult learners. For example, the Los Angeles Public Library provides a mobile learning service for bilingual adults. Its English-Spanish program, offered through a service called **Cell-Ed** [↗](#), delivers three-minute ‘bite-sized’ lessons to users’ mobile phones.<sup>43</sup>

### Digital navigation

Digital Navigators mentor digital literacy learners in using technology, building skills, and setting goals. Implement digital navigation in your program to help remove tech barriers for learners so they can better pursue their educational and career goals.

**EdTech Center @ World Education** [↗](#) has been working to develop new models for programs to offer digital navigation services. Their guiding resources include a **Digital Navigator Playbook** [↗](#) and many **Digital Navigator Resources** [↗](#) to get started.

**Literacy Minnesota** [↗](#) has developed a toolkit to help organizations develop their own digital navigation programs.

## Pause and Reflect

What are some barriers that your learners may face in accessing or using technology?  
What options do you have to support them in these areas?

What is something new that you learned in this section that you will apply when supporting your learners or creating learning activities for them?



● Chapter 5

# Strategies for Building Digital Literacy for the Whole Learner

**We've defined digital literacy, explored our diverse audience of adult learners, and have covered planning and other ways to offer much-needed support and guidance. This section is where we put our new knowledge into action. Understanding the theory behind digital literacy and whole learner instruction is helpful, but it will only get you so far. How can you take what you've learned and put it into practice?**

You'll find that the following research-based strategies pair with the digital literacy skills outlined in chapter 3. These are practical examples designed to support the needs of the whole learner. You can read them today and potentially use them in your instruction tomorrow.

These strategies have been adapted from each corresponding **Learner Variability Navigator** [🔗](#) page (linked in each section below). These pages provide many useful resources as well as research citations for each strategy. Below we have highlighted field examples as well as select resources. Consider modifying activities and resources based on learner needs and desired outcomes.

## Strategies That Promote Instructors' Mindset Toward Equity



### Build empathy for your learners

In guiding adult learners, you have an important role—and it's one that you likely know should be approached with great care. Each of us has encountered or is dealing with complex feelings and challenges that aren't necessarily known to others. And of course, no one is ever 'done' **building empathy** [↗](#).



#### Quick tip

Planning opportunities for pair or small group work is a thoughtful way to build empathy in the learning environment. Providing learners structured opportunities to work with a peer can reduce anxiety and apprehension around trying new things. Check out the **How to Facilitate Pair Explore Guide** [↗](#) for language and tips.

It's an ongoing process that involves understanding and sharing learners' emotions and experiences, reflecting on your own biases, and valuing learners' feedback. As a result, you can build trusting relationships that help learners to stay motivated and continue tackling new challenges.

Here are a few strategies for cultivating empathy:

- Create an inclusive learning environment. Learning about adults' lives and experiences enables educators to **structure and plan content** [↗](#) relevant to the learner.
- Be an active listener in conversations. When adults share their concerns or apprehensions with you—particularly around learning experiences—pay attention to the words they use to describe their feelings, and make it a point to remember any past experiences they have, such as feeling uncomfortable in school due to a language barrier, learning difference, or stereotype threat they faced due to race or gender.
- Conduct '**empathy interviews** [↗](#)'.<sup>44</sup> These could be one-on-one conversations where you ask open-ended questions to gain a deeper understanding about specific experiences the learner has had. When approached carefully, these interviews can help you to uncover unacknowledged needs.



### Develop your cultural awareness

Expanding your **cultural awareness** [↗](#) can transform a learner's personal experience. With it, you can build genuine relationships and keep harmful stereotypes at bay. To expand your own awareness, you need to build empathy for diverse learners. How are they approaching this experience, and what perspectives and challenges might they be bringing along with them? Recognize how you might share several important identities in common with those of learners; for example, are you perhaps both parents, members of

the same faith, or from the same region? By seeing the overlap and acknowledging any preconceived notions (biases) you may have, you'll be equipped to share authentically and to build learners' **sense of belonging** [↗](#).

Some of the steps toward developing your cultural awareness are powerful and might even feel intuitive.

→ Reflect on the impact of your own learning experiences, beliefs, and biases using resources like these:



Watch **The danger of a single story** | **Chimamanda Ngozi Adichie**



Examine your power and/or marginalization with the **Wheel of Power and Privilege**



Earn a **micro-credential** in developing a coaching/mentoring vision for equity

→ Express a respectful interest in adult learners' background. You can do this in more elaborate ways, such as by acknowledging and celebrating differences in traditions, beliefs, and social behaviors, or in something as basic as taking the time to practice and master the proper pronunciation of names that are unfamiliar to you.

→ Maintain sensitivity around language being used. Are you paying attention to learners' pronouns, which represent their gender identities? Are you considering the language level of the resources you are accessing to best support English language learners you serve, and seeking out supporting resources in their native language?<sup>45</sup>

### Resources

ATLAS (The Adult Basic Education Teaching & Learning Advancement System at Hamline University) curates a list of **Cultural Competency Resources** [↗](#) for teachers/tutors who are guiding adult learners. These resources include instructional approaches and resources to gain a more in-depth understanding of some Adult Basic Education (ABE) learners' cultural groups.

**Learning for Justice** [↗](#) offers ready-to-use digital literacy lesson plans that incorporate essential social justice topics. Teachers can search for and filter lesson plans by digital literacy subject. Though lessons are developed for K-12 instruction, they can be modified for learners of any age.

Literacy Minnesota offers an **Equity and Cultural Awareness in Education Certificate Program** [↗](#). Through this professional development program, you will learn to understand yourself within a cultural context and develop methods for nurturing a learning environment where all identities are affirmed and included. Workshops are available online.

## ☆ Adopt a strengths-based approach

When you take a **strengths-based approach** [↗](#), you're starting learners off from a point of positivity rather than focusing on their difficulties. Identifying, communicating, and leveraging adult learners' existing talents, interests, and abilities helps you to personalize the tasks ahead.

These strengths can be wide-ranging; think outside of traditional academics. Someone with a creative hobby, a background in working or volunteering with people, or experience in a hands-on trade brings valuable skills to the table. By reinforcing just how much a learner already knows and can do, you are reminding them what they've already accomplished as they push outside their comfort zone.

A strengths-based approach could involve all kinds of interactions. Here are three examples:

- Five principles of strengths-based education are explored in this **guide** [↗](#). Activities can include discussion **prompts** [↗](#) and survey questions you can use with your learners, such as: *“Think of someone you admire or respect. What is it about this person that you admire the most? What are their greatest strengths? Do you share any of these strengths?”*

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- Assign tasks that build upon learners' existing abilities, such as encouraging someone who has raised, taught, or volunteered with young children to brainstorm a digital craft project or write a short story.

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- Emphasize their strengths when delivering feedback, including when they run into problems or setbacks. Language and feedback should be specific, focus on the process, and normalize making mistakes.

### 💡 Quick tip

Specific positive feedback increases the likelihood that learners will use and recall the skill you have given praise on in the future. Here are a few examples you can adapt to build learners' confidence and motivation, and encourage learners to take learning risks:

- “I like how you thought of keywords to search for this information. Now let's try to evaluate the search results together.”
- “I noticed that when you got stuck, you tried another way! That's a great digital learning strategy. Can you explain to me what you did to overcome the challenge?”
- “I noticed that you used the strategy \_\_\_\_\_ that we learned yesterday/last week/etc. That's a great way to continue building your computer skills.”
- “I can tell you have put a lot of time and effort into learning \_\_\_\_\_. I have noticed you are now able to \_\_\_\_\_.”

## Strategies to Support Learner Mindset

### Foster growth mindset

What does it mean to **foster a growth mindset** [🔗](#)? It's the difference between assuming we can never get better at a task (fixed mindset) and believing that we have the capacity to improve. Adults with the latter (growth mindset) are less easily discouraged or sidetracked by failure, instead viewing it as a touchpoint along a path toward eventual mastery. Mindsets can impact your thought processes and reactions to experiences (**learn more here** [🔗](#)).

When it comes to growth mindset, context matters. Not everything can be overcome by perseverance, particularly for adults who have experienced systemic racism, oppression, or discrimination in education and workforce systems. Still, there are ways this strategy can be helpful to adult learners seeking digital literacy skills.

Learning involves effort, mistakes, reflection, and refinement of strategies. While it would be wonderful if each of us could pick up a new skill flawlessly the first time, this is certainly not realistic.

Four things you can do to encourage a growth mindset in adult learners:

- Demonstrate that you aren't the world's foremost expert when it comes to technology. Make it known that you also encounter struggles with new skills or tasks by sharing a personal story. This will help them understand that they can persist through challenges, too.

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- Frame any assessments as an opportunity for them to show what they know versus focusing on deficiencies. The emphasis here is on continuous follow-up and growth.

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- Ask learners to briefly write about any negative emotions they're experiencing before a quiz or assessment. This gives them a chance to size up their own concerns and more objectively evaluate them.

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- Watch this video **Three ways to celebrate mistakes in class** [🔗](#) to understand how to normalize making mistakes.

### Quick tip

Productive struggle is the idea that a big part of learning happens when we try a new skill, make mistakes, incorporate a new strategy, and try again. Most people learn at least some digital literacy skills through productive struggle! Making mistakes is productive and part of the learning process. Here are some prompts you can incorporate into your instruction to encourage learners as they engage in productive struggle to practice a digital literacy skill:

- What else could you try?
- Do you see anything here that might help solve this problem?
- What happens if you \_\_\_\_\_?
- What doesn't work?
- What if you try to \_\_\_\_\_? Do you think that strategy could help here?
- Try for \_\_\_\_\_ minutes. If you still need help, I'll come back.



## Offer authentic audiences and purposes

When we're empowered to develop and share our voices, passions, and arguments, learning becomes a joy instead of a chore. Each of us feels as if our contributions matter and are valued when we have **authentic audiences and purposes** [↗](#) for our work.

Finding ways for adult learners to make these connections and experience the 'why' behind their learning, then, is critical—both for building motivation and their own self-expression.

Two approaches you can take to make your instruction more meaningful:

- Ask your learners what topics, tasks, and purposes are relevant for them in their day-to-day lives. These items can help you to build bridges between their interests, needs, and abilities. Here are some questions to start with: *What are you here to learn and why? How often do you use digital devices, like a tablet, smartphone, or computer? Have you taken similar classes before? What do you want to work on today? What digital or computer skills have you practiced before? When it comes to using technology, where are you struggling?*
- Survey learners on the types of tasks that would be useful for them to know in a work-related context, and after including them in your instruction, offer some suggestions for how they can continue to hone newly acquired skills informally on the job.

### FIELD EXAMPLES

#### Write a blog post

Sharing our knowledge can help us gauge just how much we've learned. This task enables learners to demonstrate their understanding in their voice and connect to a specific audience, adding more personal context and perspective to concepts that might otherwise be abstract.

Like most knowledge-building writing tasks, this one starts by reviewing existing materials. Learners will need to read an assortment of pre-selected blog posts before they can start writing one of their own, and then you'll want to provide feedback on their work. Provide clear guidelines about the title, format, length, and audience for the blog post. For more information, see **this example** [↗](#).

#### Immigrant stories

Digital literacy provides new pathways to share our stories and connect with others. **Immigrant Stories** [↗](#), a project created by the Immigrant History Research Center at the University of Minnesota, provides lesson plans, instructions, and video tutorials to support individuals to share their stories by creating 3-5 minute videos.

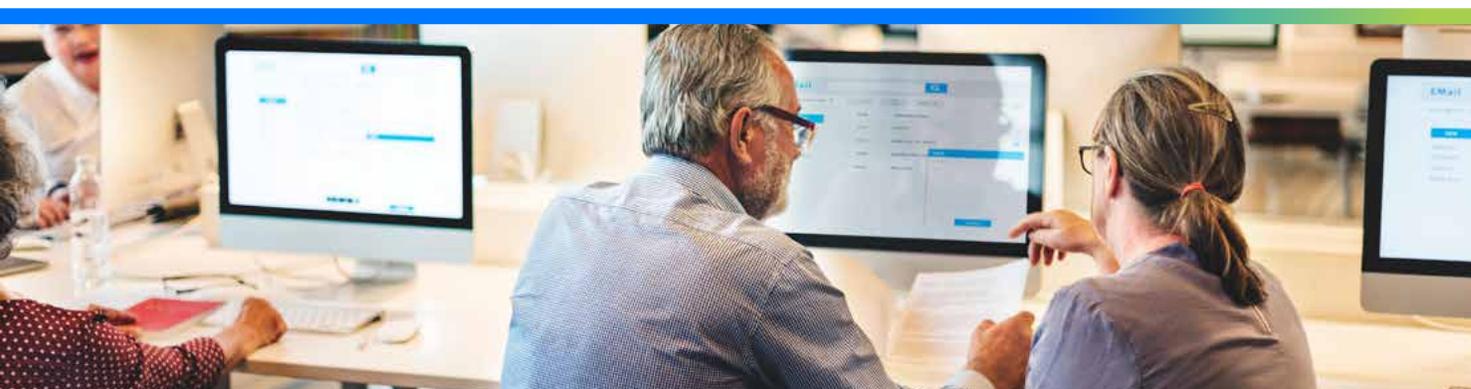
## Strategies to Support Reflection on Learning



### Set and monitor goals

Even major achievements can seem possible when broken down into manageable steps. Intentional **goal setting and monitoring** [🔗](#) gives adult learners and those supporting them the tools to map out their learning journey with actionable milestones. Big picture goal setting may involve making a digital vision board—a collection of images and text—which can be saved and edited. Along the way, they can celebrate small wins, face problems with less anxiety, and focus their learning toward mastering a specific skill.

Progressing toward a desired outcome involves higher level thinking, but don't forget that it's also an emotionally driven experience. Building in opportunities to grapple with bite-size learning and acknowledge development keeps frustration at bay. For older adults, setting goals and monitoring progress also assists with long-term memory retention, including their ability to recall facts and related information.



Three ways you can support learners in **setting and monitoring their goals** [🔗](#):

- Consider adding 'sub-goals' to each larger goal. As learners make progress, they will feel a sense of accomplishment; calling out sub-goals from a broader effort also makes them less intimidating.

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- Put adult learners in the driver's seat by encouraging them to independently create their own goals. This boosts the relevance of what they're learning and how invested they'll be in the process. Prompt questions include: *What are my values? What drives me? What do I ultimately want to achieve? Why do I want to achieve that? What would my best friend and/or partner say my goals are?*

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- Explore digital goal setting tools. Show learners how to set up reminders or countdowns on their devices, and update shareable lists to help them be more accountable as they make progress, which also allows you to see if they're getting stuck or if you could be of assistance.<sup>46</sup>

### Create a SMARTIE goal

You may have heard about SMART or SMARTIE goals, or have incorporated them into your life. If you haven't, or if you'd like a quick refresher, these goals are:

<b>Specific</b>	can be described precisely rather than a vague idea
<b>Measurable</b>	can be tracked using concrete metrics
<b>Actionable</b>	isn't just an idea, but something a learner can actively work on
<b>Realistic</b>	is within a person's capabilities, even if it's stretching their current skills
<b>Timely</b>	is tied to a certain time frame <b>with a clear deadline</b>
<b>Inclusive</b>	centers design for traditionally marginalized groups
<b>Equitable</b>	checks for impact across lines of identity and power

A sample SMARTIE goal might be to write and send a two-paragraph email with a relevant photo attachment by the end of a two-week period.

It starts with careful consideration of what a learner wants to be able to do, why they want to do it, and what knowledge they'll need to gain to get there. Learn more about moving from **setting SMART goals** [↗](#) to **SMARTIE goals** [↗](#).



### Provide time for purposeful reflection

Reflection is something of a misnomer, as people often assume it comes after skill building takes place. But learners and those supporting them can reflect on their work throughout the learning experience.

Through **purposeful reflection** [↗](#), this process is more strategic than a simple look in the rearview mirror. Instead, it prompts learners to think critically about the digital skills they've developed and to question any assumptions they have. It aids in building connections between what has been learned and how that might apply to scenarios in the real world.

Purposeful reflection also can help foster a growth mindset, as it centers on self-improvement ("How can I improve?") rather than assessment ("How well do I know this?").

You can help learners with purposeful reflection by:

- Including ‘check-in’ prompts for them to respond to, either verbally or in writing, at certain points throughout your instruction with them.
- Reinforcing the idea that reflection is an ongoing process versus an activity that takes place only after learning concludes.
- Having a dialogue about real-world applications of the digital skills they’re currently working on. *How will you use what you learned today to meet your goals? What other things could these digital literacy skills help someone accomplish? Why are these skills important?*

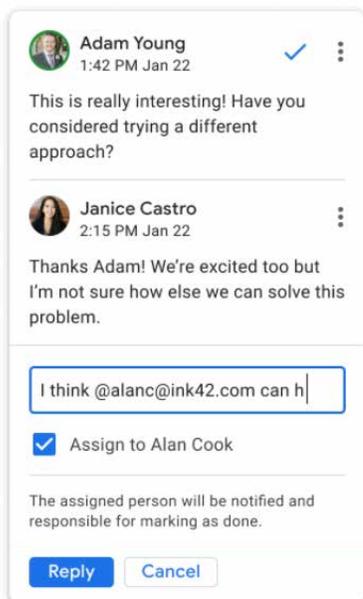
### Quick tip

Plan for exit tickets with learners, ideally after every lesson. This can be as simple as reviewing the goal you started with and deciding together if you have met it, or still need to work toward that goal. Here are some exit ticket questions to ask learners before the end of a learning session:

*What did you learn today? What is one thing that you learned that will help you meet your goal? Let’s look at our goals again. Did we accomplish our learning goals today? How will you use what you learned today? What would you like to explore more next time? What is something that surprised you today? What mistake did you make that helped you try something new?*

 If you are teaching virtually and/or all learners have access to a device, Padlet  is a great resource to use for virtual exit tickets. Using Padlet in the Virtual Classroom | ATLAS, MN ABE Connect

## FIELD EXAMPLE



**Adam Young**  
1:42 PM Jan 22

This is really interesting! Have you considered trying a different approach?

**Janice Castro**  
2:15 PM Jan 22

Thanks Adam! We’re excited too but I’m not sure how else we can solve this problem.

I think @alanc@ink42.com can h

Assign to Alan Cook

The assigned person will be notified and responsible for marking as done.

### Encourage reflection in shared documents

Shared documents offer an exceptional tool for reflection, as they’re accessible online and offer a space where you can have an asynchronous dialogue (an exchange that takes place over time) about a specific aspect of learning.

The document itself could be instructional material you’re already using.<sup>47</sup> You might leave a comment in a certain spot with one or two questions related to a recent task. Learners can then reply, tagging you in their responses. Everything stays organized as you can both see and reference the document’s sections.

Comments can be reviewed later once further progress has been made, showing learners just how much ground they’ve already covered, and the critical thinking they’ve done. Meanwhile, as learners are reflecting, they’re also practicing use of a critical remote collaboration tool—a useful skill for the future of work.<sup>48</sup>

## Strategies Focused on Explicit Instruction of Digital Literacy Skills



### Build up basic computer skills

Direct instruction on the **basics of using a computer** [↗](#) can open up new worlds for adults. This includes understanding the functions of computer hardware (trackpads, monitors, and USB components) and navigating foundational digital functions (setting up email accounts, using search engines, starting files). **Lessons** [↗](#) where you walk through small steps and use as little jargon as possible can help to build adult learners' confidence.<sup>49</sup>



### Quick tip

Support learners to build their basic computer skills with video tutorials and interactive online learning modules. **Northstar Online Learning** [↗](#) offers online interactive practice modules in the following topics: **Basic Computer Skills** [↗](#), **Using Email** [↗](#), and **Microsoft Word** [↗](#).

Additionally, **GCFLearnFree.org** [↗](#) offers **Online Safety** [↗](#) tutorials to help learners develop skills to protect their privacy and devices while online and the **Basics of Email Etiquette and Safety** [↗](#).



A few formats you might consider for covering the basics:

- Create simple **presentations**<sup>50</sup> [↗](#) or **videos**<sup>51</sup> [↗](#) with brief, easy-to-understand instructions or screenshots on how to complete a task or use an application. As you build it, ask yourself: Could they use this without assistance or guidance? If not, make it clearer. Store mobile-friendly course materials where learners can easily access them on or offline. (Here's some **expert advice**<sup>52</sup> [↗](#) on how to get started with multimedia projects; see "A technical tip" section.)
- Encourage adult learners to practice what they've learned, both to ensure that they understood it and to help them to retain the information for future use. These can include 'homework' tasks related to their personal and professional lives, such as sending an email, looking for a job, creating a Google document, or looking at their child's class website.



## Hone internet search skills

Over the past two decades, searches have gone from an abstraction to brands becoming a commonly used verb. (“Let’s Google that.”) The ability to search the internet introduces adults to a limitless portal of knowledge at their fingertips. That sounds wonderful; yet getting there isn’t necessarily intuitive. Therefore, assisting them with **internet search** [↗](#) is critical.

Two approaches to help them with searching for information online:

- Guide learners to use their own background knowledge to generate a question. Pique their curiosity by asking them a fact they’d like to check or something they’d like to know.

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- Demonstrate how to formulate vocabulary or terms that will lead them to the search results they’re seeking. For example, you could find banks with ATMs using a variety of location-specific wordings: *banks near me with ATMs* or *ATMS in [zip code]*.

### LINKING THEORY TO PRACTICE [↗](#) | 5

Performing effective internet searches is a key digital literacy skill. Check out the **Sample Northstar Digital Literacy Curriculum Lesson Plan**.



#### FIELD EXAMPLE

##### Use the **SEARCH** acronym

Media literacy is born out of an ability to sort through and evaluate what we find on the internet. ISTE has developed a handy acronym that you can share with adult learners after introducing the initial concepts of internet search:

- S** – select keywords
- E** – evaluate content
- A** – add quotation marks
- R** – refine results
- C** – check the URL
- H** – hunt for important information

Learn more about **SEARCH** [↗](#).<sup>53</sup>



## Develop online reading strategies

Reading online isn't like a print periodical; yet our past reading experiences inform our approach to reading on the web. For those who are totally new to it, reading on the internet can seem chaotic and counterintuitive. It requires one to focus and know which links to ignore or those to explore further. Making connections across media and interpreting multimedia are all **online reading** [↗](#) skills that come after much practice.

You can help adult learners to become more confident online readers in multiple ways:

- By recording a walk-through of navigating an internet text, showing where you click and explaining your rationale for choosing some URLs over others.

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- By highlighting and summarizing information drawn from charts, infographics, and other visual presentations.

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- By having learners practice **reading more deeply** [↗](#) rather than casually by noticing headings and highlighting key ideas.<sup>54</sup>

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- By adding specific **reading comprehension instruction** [↗](#) to support learners.



## Train source evaluation techniques

Not all information is created equally or is worthy of our attention. While we may know this, it can be difficult to tell which sources are reliable or legitimate—especially in an era where websites have become so sophisticated. Because of this, **evaluating sources** [↗](#) found online is of increasing importance.

A few tips on effectively evaluating unfamiliar sources:

- Introduce concepts like “**relevance, accuracy, bias, and reliability** [↗](#),” describing what these terms mean and how to apply them when sifting through search results.<sup>55</sup>

Prompt questions include: *Is this site relevant to my needs and purpose? Who created the information at this site, and what is this person's level of expertise? When was the information at this site updated? Does the website present only one side of the issue, or are multiple perspectives provided? Does the site state mostly facts or opinions? Look for specific words to identify opinions like good, best, and worst, and words like never, always, probably, and should.*

- You can model how to evaluate online information in real time, for example, by showing the steps you would take to identify bias and determine if a source is reliable. Collaborate with adult learners to create search activities that are relevant to their needs and interests.
- Remind adult learners that looks can be deceiving; even websites that appear to be official or professional may have questionable origins.

## LINKING THEORY TO PRACTICE | 6

Supporting learners to develop their skills to question and remain skeptical will help them sift through the wealth of information available online. Introduce learners to these critical thinking strategies to assess reliability of online sources.

### **Strategies to Assess Source Reliability**

## Strategies That Promote Active Learning



### **Encourage experiential learning**

Think of the last time you tried out a new skill for the first time. How was that different from reading about it or participating in a discussion? Actually trying it likely reinforced your motivation and put you into a different mindset where tough things seemed possible. Otherwise known as learning-by-doing, this highly active approach can involve guidance, or the learner can explore new skills independently.

**Experiential learning**  has four key elements: concrete experience, reflection and observation, development of new ideas, and experimenting with new ideas. It is excellent practice for real-world scenarios, where people face unknown situations and must problem solve on the spot.

There are many examples of this approach that blend practical, hands-on learning exercises with actual work. These might include (but aren't limited to) working on **case studies** , internships, creative performance exhibits, **problem-based learning** , field experience, job shadowing, service learning, **simulations** , community-engaged research, and international learning experiences.



You can introduce experiential learning in several ways:

- By assigning relevant real-world tasks for an adult learner (for example, publishing an announcement on social media) and asking them to move through the steps to complete it.

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- By creating a roadblock within a project that the learner needs to problem solve around, such as asking them to incorporate an image file into a presentation that the software doesn't support.

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- By having learners **reflect on the experience** [↗](#) with questions like: *What was valuable about the experience? What is a strength you identified in yourself? What skills would you like to work on?*

#### FIELD EXAMPLE

##### **Experiential learning**

Experiential learning, or learning by doing, reinforces the relevance of certain skills while helping learners to apply them in practice. This type of learning often incorporates tools used in the workplace, and sometimes can be done on their own once a learner becomes comfortable with applying a new skill.

For example, Google for Education offers video-based **Applied Digital Skills** [↗](#) that walk learners through the process of creating a real-world deliverable. Virtual lessons are divided into various interests, such as those geared toward job seekers, financial literacy, or everyday life. Adults can learn how to create a resume in Google Docs; conduct internet searches to find useful cover letter templates; or discover how to use Google Drive to store and organize documents, images, and other files.

These are tasks that they can continue to refine and update, which will allow them to build familiarity with their tools and feel more confident in exploring them on their own.



## Design multimedia projects

We are all consumers of media these days. But to become a creator of it entails a different set of skills. Working on **multimedia projects** [↗](#) can enable us to express ideas and emotions visually and aurally—communicating our experiences, culture, and thoughts to others in a new way. Video, audio, and digital production aren't necessarily taught in schools, and many of today's adults had few if any opportunities to hone these skills in a traditional classroom setting. Yet along with creativity and problem solving, they are increasingly important in the world we live in.



You can help adult learners gain multimedia skills using different approaches, such as:

- Modeling digital storytelling for them, where you demonstrate how you shared an idea using video or audio—detailing the tasks from start to finish.

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- Asking learners to suggest ideas they would like to share with a certain audience, and working with them to determine which medium they should use.

### Multimedia storytelling with English language learners

**Multimedia storytelling**  offers an engaging, accessible way to practice a new language and build digital skills. One educator assigned such a project in a college-based intensive English institute. The project’s theme explored “What is an American?” and encouraged learners to read, write, and verbally share their responses to how they viewed U.S. culture through their lens.

The production process reinforced language acquisition in a number of ways. Learners crafted a narrative, then rewrote it into a script that they recorded. After listening to the recording, they judged their own work and re-recorded as needed, later selecting images or video clips that are understood across cultures.

As learners revised and refined their work, the educator noted that it gave them “...the opportunity to practice language more and more at each stage. For example, my students re-recorded their voices upwards of five times, asking my help in pronouncing words and repeating sentences so that their spoken English would be nearly perfect. When I analyzed the finished projects, I had a good sense of what the students could do with writing, listening, and speaking.”<sup>56</sup> This exercise could also be modified to involve recording in a learner’s first language, if not English, or in both languages.

## Strategies That Encourage Collaboration Among Learners



### Create communities of practice

If you’ve ever been part of an informal group focused on learning something—whether it was a new tool for your job or a creative effort like woodworking—you’ve been part of a **community of practice** . These collective groups help people to explore a topic of interest in depth, over a longer period of time.

This doesn’t have to happen face-to-face; in online communities of practice, members can share information and resources, help one another to address problems they’re facing, and even create repositories of what they’ve gathered and learned (methods, articles, etc.) Those in a community of practice aren’t led by a single person; any member can support the others by sharing long-held or newly discovered knowledge and expertise.

Here are a couple of possibilities for creating communities of practice:

- Partner with other instructors, mentors, or volunteers to bring together adults who are studying one-on-one or in small groups.
- Help adult learners to locate and connect with others who have mutual interests online through local organizations, meet-up groups, or clubs.

#### FIELD EXAMPLE

### Communities of practice

Building community doesn't just foster a connection; it can reduce the anxiety that comes with feeling vulnerable as a learner.

The quality of your interaction with adult learners and their interactions with one another can actually help them to persist.

Activities that help learners and staff get to know one another build trust and camaraderie. If group activities aren't possible, various adult learning programs have shown that merely taking time to introduce individual learners and staff to each other made a positive impression on learners and built a sense of community. Cultivating a sense of belonging can be accomplished in other ways, too: through informal icebreaker activities to help learners get to know one another and express their identities, and through recognizing learners' efforts, progress, or achievement.<sup>57</sup>



### Quick tip

Icebreakers are a great way to schedule time for learning guides and learners to get to know each other in order to build trust and community. Here are two icebreaker ideas to get you started. You can find more ideas at [ESL Conversation Questions](#).

- 1 Two Truths and One Lie:** Each person writes, or thinks of, two sentences about themselves that are true facts, and one sentence that is not true. Then, everyone shares their sentences while the rest of the group works to determine which sentence is a lie. Give time to ask each other more about the sentences that are true.
- 2 Conversation Starters:** Everyone takes time to write answers to one or two of the following questions. Then, discuss in pairs, small groups, or as a whole group.
  - What is your favorite thing to eat? Describe what you love about this food.
  - Share something that happened to you recently that made you smile or laugh.
  - What three words best describe you? Give examples of why you choose those words.



## Provide access to mentors or coaches

**Mentors or coaches** [↗](#) play a critical role in adult learning. They can foster a sense of safety for those who have had adverse past experiences and provide strong support where otherwise learners might feel as if they're on their own. This isn't limited to those guiding learners, though; peers can serve as mentors or coaches to one another, showing learners what's possible by sharing common experiences and showing empathy for their challenges.

This kind of collaboration opens up communication channels, builds trust, and develops relationships between experienced mentors or coaches and novice mentees/learners. Mentoring and coaching isn't limited by geography, as virtual platforms open up opportunities for adult learners to engage with others anywhere there is an internet connection.



You can introduce the concept of mentoring or coaching a few ways:

- By asking adult learners who they trust in their own lives and communities to provide information and resources

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- By tapping into resources such as online forums that allow for initial peer-to-peer connection

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- By exploring opportunities with local organizations or professional associations whose members or staff could volunteer their time and expertise

### Talking partners

Adult learners often provide significant peer support to each other. When learners build relationships with one another, they serve as peer tutors, accountability partners, and even just a friendly face in class. Joey Lehrman, Program Effectiveness Coordinator in Adult Education at Delgado Community College, describes an effort that built community among adult learners—a practice they borrowed and adapted from the **private sector** [🔗](#).

“In the Adult Education Program at Delgado Community College, we implemented a formal structure to help nurture peer relationships between both students and staff, and it has the added benefit of being especially impactful in fully online/distance learning environments,” he said. “The short version is that we intentionally pair students with each other and task them to check-in with each other once a week or once every couple weeks. That’s it—there’s no more structure than encouraging them to share contact information and a preferred method of connecting (text message, phone, video chat, etc.)”

They will occasionally switch up talking partners after a few weeks to encourage other relationships to form, but in general, Lehrman reports that learners run with this strategy, get to know each other, and build community around the routine.

### Pause and Reflect

Reflect on what you learned in this section. Choose one section to re-read and select a new strategy that you will apply with your learners.

Identify a strategy that you want to learn more about. How might this strategy benefit your learners?

Did you read anything in this section that makes you consider modifying an activity you currently complete with your learners?

## Putting It All Together

It's worth noting that there's no single 'right way' to teach digital literacy. From conducting lessons one-on-one or in small groups to gathering in-person or online, there are a variety of ways to reach adult learners and provide support on the topics that matter most to them. You already know that guiding adults is multifaceted work that requires a thoughtful approach, and now, you've got a variety of vetted tools and approaches to help you do it.

Each of the strategies and examples included in this section can offer concrete ideas as you move forward. Keep in mind, though, that each is also fully customizable! We encourage you to share those that interest you with fellow volunteers or colleagues, discuss them with learners directly, and consider making them your own with adjustments that make sense in your instruction. The goal is to create a memorable experience that reinforces learners' confidence while enabling them to continue trying all sorts of new things independently. If you're able to help learners achieve that, even the seemingly smallest wins are a reason to celebrate.

Here is the full list of strategies for quick reference.

**Building empathy** [↗](#)

**Developing your cultural awareness** [↗](#)

**Creating a sense of belonging** [↗](#)

**Using a strengths-based approach** [↗](#)

**Fostering a growth mindset** [↗](#)

**Incorporating authentic audiences and purposes** [↗](#)

**Setting and monitoring goals** [↗](#)

**Engaging in purposeful reflection** [↗](#)

**Covering the basics of using a computer** [↗](#)

**Conducting an internet search** [↗](#)

**Enhancing online reading skills** [↗](#)

**Evaluating web-based sources** [↗](#)

**Creating experiential learning opportunities** [↗](#)

**Assigning multimedia projects** [↗](#)

**Engaging in a community of practice** [↗](#)

**Serving as a mentor or coach** [↗](#)

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## Pause and Reflect

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Think back to when you started reading this resource guide and revisit the goals you set. What are the new key learnings you will apply the next time you meet with your learners? What have you learned about meeting the needs of the whole person to support digital literacy?

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Create a list of areas to explore and learn more about. Identify why you feel you need to learn more in these areas—how will this support your interactions with your learners?

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## VI. Additional Resources

By this point, you have a clearer picture of learner variability and what that means in your interactions, and we have covered a variety of approaches and strategies that can help you successfully guide adult learners. There's a lot more to supporting others' digital literacy, of course.

Below you'll find a list of resources to take your instruction to the next level: links to digital badges and examples for two very specific scenarios—how digital literacy influences health literacy, and how your instruction can support neurodiversity.

### Micro-credentials

Digital Promise's **Micro-credential Explorer** [↗](#) allows you to search through hundreds of competency-based micro-credentials to find the ones most relevant for your work. These micro-credentials are developed, assessed, and awarded by more than 50 partner organizations, ranging from institutes of higher education to non-profit organizations. Any individual working with adult learners can benefit from earning micro-credentials to deepen and demonstrate their skills in promoting Adult Learner Variability.

### Addressing Adult Learner Variability Micro-credentials



- **Consider Adult Learner Variability to Promote High-quality Learning and Engagement:** [↗](#) An educator curates and considers factors that impact adult learners' success in order to promote high-quality learning and engagement.

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- **Designing Sessions to Support the Whole Adult Learner:** [↗](#) To design a learning session to support the whole adult, educators or facilitators use real-world learning strategies that are grounded in knowledge and understanding of the whole learner.

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- **Developing a Coaching Vision for Equity:** [↗](#) Coaches reflect on the impact of their own learning experiences, beliefs, and biases in order to develop a coaching vision for equity.

- **Developing a Collaborative Coaching Plan:** [↗](#) An educator understands different coaching and training methods, and collaboratively develops a plan with a clear approach with a person or group of people they are working with.
- **Effective Communication Strategies for Adult Learners:** [↗](#) An educator uses strategies to present new information clearly, connecting to adult learners' prior knowledge and relevant experiences.

### SPOTLIGHT: NEURODIVERSITY AND DIGITAL LITERACY

Learning and attention differences, often grouped under the term neurodiversity, can impact adults' engagement with digital tools. About **one in five** [↗](#) children in the U.S. has these challenges and there are an estimated 15-20 percent of adults living with a language-based disability, such as **dyslexia** [↗](#).

Those with dyslexia or other challenges may have a hard time reading online text. Helping learners identify tools that assist them in interacting with digital media can improve their digital literacy as well as help them access information in other areas of their lives. If you're using videos with on-screen text in your instruction, be sure they have a voiceover option. It is also a best practice to enable closed captions for those who have auditory processing challenges.

You can also show adult learners how to enable the text-to-speech output setting on their smartphone or tablet, using instructions like those below.

#### **Text-to-Speech: Adjusting Apple or Android Device Settings**

Check the settings on your Apple or Android device. (By default, the text to speech option is turned off.)

- For Apple devices, go to **Settings**, select **Accessibility**, then **Spoken Content** to turn text to speech on.
- For Android, go to **Settings**, select **Accessibility**, then **text-to-speech output**.

## Speech-to-Text: Using Dictation

What about those who struggle to get words on a page? Those with dysgraphia, ADHD, and other learning differences or processing disorders could benefit from using a smartphone's dictation feature, which appears in the phone's messaging apps, as well as in other popular messaging applications such as WhatsApp.

Speech-to-text technology has been shown to allow learners to more easily transfer ideas to the page, as it saves time and minimizes the intimidation factor that can come along with composing a draft from scratch.<sup>58</sup>

Text or Images-to-Speech: Speechify App

Apps can be another great resource to support learners.

Download the Speechify app to turn any text into interactive audio. Speechify can be used to turn digital books, documents, emails, or articles into audio. Once you have the app, simply take a picture of any text to have it read aloud. Speechify includes over 50 language choices.

For more assistive technology suggestions, *WIRED* magazine has compiled a list of helpful applications and other tools you can check out [here](#).<sup>59</sup>

## SPOTLIGHT: HEALTH LITERACY AND DIGITAL LITERACY

Searching the internet for important, accurate health-related information and making decisions based on these findings is a critical life skill.

Digital health literacy is the ability to seek, find, understand, and appraise health information from electronic sources and apply the knowledge gained to addressing or solving a health problem.<sup>60</sup>

To do this successfully, adults require a set of foundational skills, knowledge, and equipment.

Yet research has demonstrated that those who are socioeconomically disadvantaged are less likely to seek out health information online, especially when this factor is combined with minority status. Access could also be limited further for lower income individuals, who may not be able to afford a computer or home internet service.<sup>61</sup>

Learners could interact with health information in multiple ways. For example, they might want to conduct a search based on symptoms they've recently experienced. Determining the right keywords to use and then assisting them with evaluating the sources are ways you can support them.

They may wish to access personal records, and could do so by downloading a new health-related mobile application offered by their insurer, or by registering for an online patient portal. Patiently walking them through each of the steps required to set up an account and then showing them how to navigate an app or portal—including how to search within the software itself—will help them to troubleshoot on their own.

NNLM and All of Us have partnered with the Public Library Association and Wisconsin Health Literacy to support digital health literacy. Below are resources they have curated and created; the organizations have also developed a free **digital health literacy curriculum** [↗](#) complete with handouts, a presentation, and a program script for those guiding adult learners.

- **LibrariesTransform** [↗](#) offers free toolkits on digital literacy and health literacy at [LibrariesTransform.org](#)
- Here are guides to health web surfing and **evaluating health information** [↗](#) from MedlinePlus.
- The Public Library Association offers resources on **digital literacy** [↗](#) and **tools for healthy communities** [↗](#).<sup>62</sup>

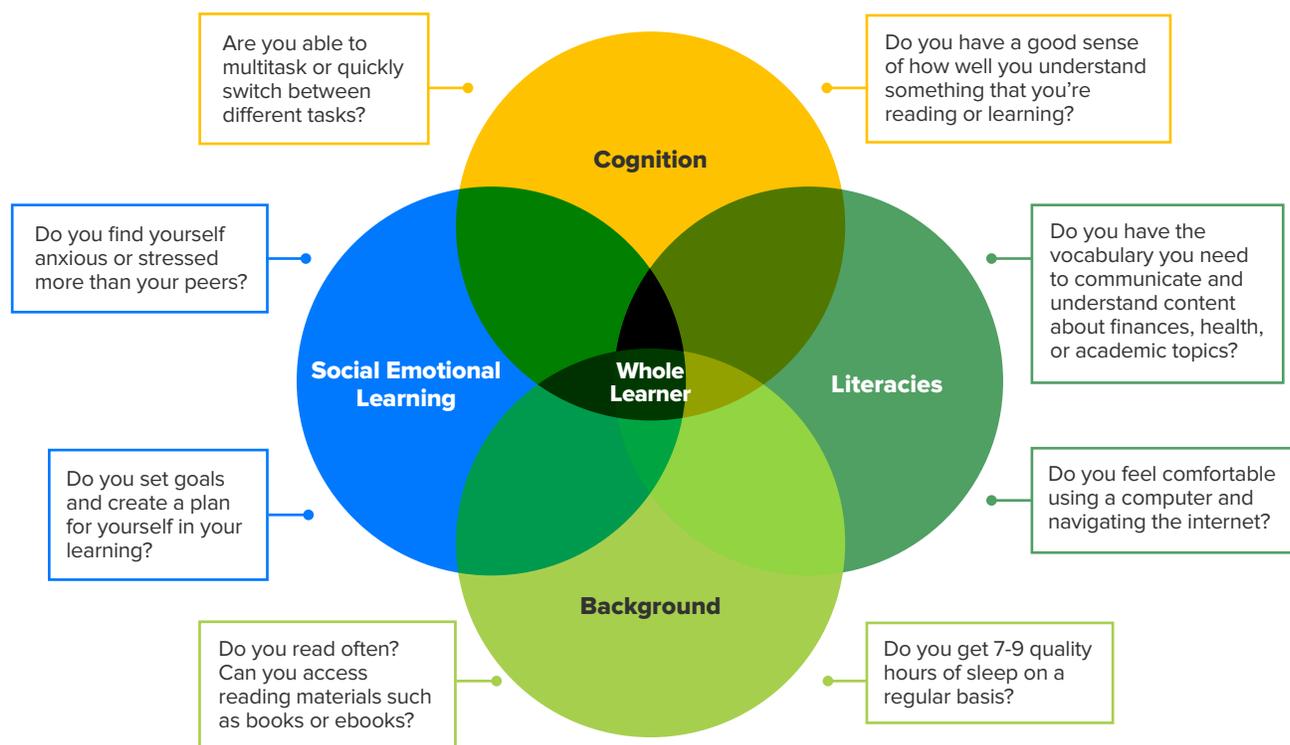
## For further reading and additional resources, check out:

- **How to Support Digital Literacy in Adult Learners:** [↗](#) An overview of considerations for mentors, instructors, and coaches. (Digital Promise)
- **Teaching Skills that Matter - Digital Literacy:** [↗](#) How to integrate digital literacy and problem solving into instruction (LINCS)
- **EdTech Center @ World Education Resources:** [↗](#) Publications, webinars, articles, and other formats exploring topics related to all aspects of using technology with adult learners.
- **Digital Skills Discussion Guide:** [↗](#) This guide can be used to understand what is happening in the businesses in your local community and how you can help. (Upskill America - The Aspen Institute)

## VII. Appendix Resources

### LINKING THEORY TO PRACTICE | 1

Getting to know the learners you serve and building a trusting learning partnership takes time! Check out our Suggested Tools to Support the Whole Learner and begin to uncover each unique learner's digital literacy goals, strengths, and needs, as well as suggestions to build a welcoming, empathetic, and respectful learning environment.



The science of adult learning: Understanding the whole learner (Tare, Cacicio, & Shell, 2020)

Start small. First, reflect on the questions in the first column of the following chart. Then, choose one resource to start with. Build from there!

Reflect on these questions centered around Literacies.	How do these resources uncover learners' digital literacy goals, strengths, and needs?	Suggested Links and Resources
<p><i>Do the learners you serve feel comfortable using a computer and navigating the internet?</i></p>	<p>Explore opportunities to assess learner skills at intake, such as Northstar Digital Literacy Assessments. Engage in a community of practice, through the Digital Resilience in the American Workforce Initiative or the Outreach and Technical Assistance Network (OTAN) in California.</p>	<p><b>Northstar Digital Literacy Assessments</b> <a href="#">↗</a> are interactive digital literacy tests, taken online, that allow test takers to demonstrate basic computer and digital literacy skills.</p> <p>Use resources in <b>Northstar Digital Literacy Assessments</b> <a href="#">↗</a> as a pre-assessment to identify the digital skills learners have and those they need to work on. This will help you target precisely what each learner requires.</p> <p>Join the <b>Advancing Equity in Digital Skills, Digital Learning &amp; Employment Tech for Adults</b> <a href="#">↗</a> listserv moderated by the <b>Digital Resilience in the American Workforce</b> <a href="#">↗</a> (DRAW) to share resources and connect with key stakeholders in efforts to advance digital skills.</p> <p>World Education's <b>EdTech Integration Strategy Toolkit</b> <a href="#">↗</a> provides guidance on how to develop learners' digital literacy when implementing edtech routines by providing sample questions teachers can ask that support direct instruction of digital skills.</p> <p>Explore how technology can enhance your adult learning lessons through <b>OTAN's Teaching with Technology Resources</b>. <a href="#">↗</a></p>
<p><i>Do the learners you serve need access to assistive technology?</i></p>	<p>To promote greater inclusion, explore accessibility tools and features to meet learner needs.</p>	<p>Minnesota Adult Basic Education Physical and Nonapparent Disability Assistant (PANDA) provides a <b>List of Assistive Technologies</b> <a href="#">↗</a> to increase your own familiarity with assistive technologies available for learners.</p> <p>Digital US Coalition, led by World Education, provides an extensive list of <b>resources</b> <a href="#">↗</a> for Digital Navigators supporting adult learners.</p> <p><b>NTEN</b> <a href="#">↗</a> provides training for organizations and educators who are using technology to meet their mission, specializing in digital inclusion.</p>
<p><i>Do the learners you serve have the vocabulary needed to communicate and understand content?</i></p>	<p>Vocabulary plays a key role in comprehension. Explore resources to assess and strategies to promote vocabulary expansion for adult learners, including English learners.</p>	<p>Use the <b>Northstar Digital Literacy Screener</b> <a href="#">↗</a> to determine whether a learner has a level of language and computer skills needed to take the Northstar Assessments in a meaningful way. Use this screener before assessing learners on any <b>Northstar Digital Literacy Assessments</b>. <a href="#">↗</a></p> <p>Consider ways to promote vocabulary for adult learners who may need to develop oral English skills, written skills, or both. Check out the <b>primary language factor</b> <a href="#">↗</a> in the Digital Promise Adult Learner Model to see how primary language intersects with other key factors like stereotype threat, auditory processing, or working memory.</p>

<p><b>Reflect on these questions centered around Cognition and Background.</b></p>	<p><b>How do these resources support learners' cognition and help instructors better understand learners' background?</b></p>	<p><b>Suggested Links and Resources</b></p>
<p><i>Are the learners you serve quickly able to multitask or quickly switch between different tasks? Do you provide opportunities for learners to practice building this capacity?</i></p>	<p>Incorporating strategies to improve memory into your instruction benefits all digital literacy learners.</p>	<p>Explore how factors like <b>cognitive flexibility</b> <a href="#">↗</a> impact digital literacy in Digital Promise's <b>Adult Learning Model</b>. <a href="#">↗</a></p> <p><b>How Memory Works?</b>   <b>MN ABE Connect</b> <a href="#">↗</a> includes easy strategies that you can incorporate into tutoring sessions to help learners build their abilities to restore, retain, and recall information. Try just incorporating one activity at a time into your tutoring session.</p>
<p><i>Do the learners you serve have a good sense of how well they understand something they're reading or learning? Do you provide opportunities for learners to reflect on and summarize what they have learned?</i></p>	<p>Digital texts are often dense and require a higher level of reading comprehension.</p>	<p>Use these resources to provide supportive reading instruction:</p> <ul style="list-style-type: none"> <li>• <b>Marshall Level Reading Program</b> <a href="#">↗</a></li> <li>• <b>Literacy Minnesota: Reading ESL Instructional Support Kit</b> <a href="#">↗</a></li> <li>• <b>GCFGlobal: Free Reading Tutorials</b> <a href="#">↗</a></li> <li>• <b>Newsela</b> <a href="#">↗</a></li> <li>• <b>ReadWorks</b> <a href="#">↗</a></li> </ul>
<p><i>What factors affect your learners' ability to meet their digital literacy goals? (access to technology, enough rest, childcare, etc.) Do you provide referrals to resources?</i></p>	<p>Be prepared to refer learners to navigators in the community who can best help them to remove barriers they may have to attending your program.</p>	<p>Use the <b>questions</b> <a href="#">↗</a> provided in this guide to survey learners.</p> <p>Get to know your adult learners and the <b>factors</b> <a href="#">↗</a> and <b>strategies</b> <a href="#">↗</a> that can affect digital literacy via Digital Promise's Adult Learning Model.</p> <p>Learners can find local resources they need 24/7 by calling <b>United Way 211</b>, <a href="#">↗</a> a free and confidential national service.</p> <p><b>Devices and Connectivity</b></p> <p><b>Digitunity</b> <a href="#">↗</a> is a national nonprofit organization working to make sure that everyone who needs a computer has one.</p> <p>Find low-cost internet and computers in your area through: <b>everyoneon</b> <a href="#">↗</a></p> <p><b>The Affordable Connectivity Program</b> <a href="#">↗</a> (ACP) helps low-income households pay for broadband service and internet connected devices.</p>
<p><i>Which lifelong learning skills and technology approaches can best support adult learners' success in the future of work?</i></p>	<p>Explore resources developed by ISTE's SkillRise Initiative to help your organization use educational technology to prepare adult learners for upskilling.</p>	<p>Dive into the <b>Profile of a Lifelong Learner</b>, <a href="#">↗</a> a framework that defines the digital and lifelong learning skills that adult learners need to be successful.</p> <p>Explore <b>the SkillRise framework</b> <a href="#">↗</a> to better understand how to leverage technology to improve education and training programs.</p>

Reflect on these questions centered around Social Emotional Learning.	How do these resources help to build a welcoming learning environment?	Suggested Links and Resources
<i>How can you cultivate a sense of belonging with your learners?</i>	Learn about issues related to digital equity and digital inclusion to understand the context of adults in your learning environments, and work to create a sense of belonging.	<p>Check out National Skills Coalition’s reports on <b>digital equity</b> <a href="#">↗</a> as well as the National Digital Inclusion Alliance’s <b>practitioner supports</b> <a href="#">↗</a> to better understand the context of adults in your learning environments.</p> <p>Learn how to cultivate a <b>sense of belonging</b> <a href="#">↗</a> to support digital literacy in Digital Promise’s <b>Adult Learning Model</b>. <a href="#">↗</a></p> <p>Demonstrate your skills to support the whole learner through earning <b>competency-based micro-credentials</b>. <a href="#">↗</a></p>
<i>How can you support learners who may be struggling with mental health challenges or experiencing stress or trauma?</i>	Planning a predictable routine for each class or tutoring session you have can give learners a sense of stability. In turn, this can reduce stress and the out-of-control feelings that often accompany traumatic experiences, as learners will know what to expect.	<p><b>Mental Health First Aid</b> <a href="#">↗</a> is a skills-based training course that teaches participants about mental health and substance-use issues, and how to make quality referrals.</p> <p><b>New Routines for Starting Class, Video   Literacy Minnesota</b> <a href="#">↗</a> provides ideas to build predictable learning routines during your tutoring sessions.</p> <p>The <b>Northstar Digital Literacy Curriculum</b> <a href="#">↗</a> is available for purchase and provides predictable digital literacy routines through structured lesson plans: <b>Sample of Northstar Digital Literacy Curriculum</b> <a href="#">↗</a></p>
<i>Do you set intentional time for goal setting with the learners you serve?</i>	Goal setting is motivating for learners. Purposeful reflection can help foster a growth mindset, as it centers on self-improvement (“How can I improve?”) rather than assessment (“How well do I know this?”).	<p>Use the <b>Northstar Digital Literacy Assessments</b> <a href="#">↗</a> to pre-assess learners’ skills in a digital literacy topic area, like email or Microsoft Word. After completing an assessment, learners will receive a report of skills they need to improve and skills mastered. Give the same assessment after instruction to reflect on growth in a topic area.</p> <p>Attendance can often be a barrier to meeting learning goals. Use the <b>Setting Attendance Goals   Literacy Minnesota</b> <a href="#">↗</a> to identify obstacles to good attendance and set realistic attendance goals.</p>

## LINKING THEORY TO PRACTICE | 2

Pre-assessing learners' digital literacy is an important first step in planning for instruction. The **Northstar Digital Literacy Screener** [↗](#) is a tool you can use to get a better picture of the specific digital literacy competencies learners may need support in.

You may also want to use the questions below to pre-assess your own digital literacy within each competency, and interview learners to get a sense of the skills categories they will need the most support in. We are all lifelong digital literacy learners.

Once you have assessed digital literacy competencies. Visit the **Steps to Follow to Help Learners See Practical Outcomes in Digital Literacy** [↗](#) in this guide as a tool to get started in instruction.

A person who is digitally literate can:	Questions to ask yourself and learners	Self-Assess
<b>Understand graphic design and navigate interfaces</b> (photovisual literacy)	<p><i>Can you use different mouse clicks to perform tasks on a device? e.g., right-click, left-click, and double click</i></p> <p><i>Can you scroll up and down a page to find information?</i></p> <p><i>Can you find and use common website features? e.g., play buttons, hyperlinks</i></p>	<p><input type="checkbox"/> Yes, I can easily complete all of these tasks.</p> <p><input type="checkbox"/> No, I still need practice to complete some of these tasks.</p>
<b>Create multimedia works</b> (reproduction literacy)	<p><i>Can you take a screenshot on a smartphone or other device and edit the picture by adding a caption or other text?</i></p> <p><i>Can you add photos from the internet to a PowerPoint or Google Slides presentation, citing sources?</i></p>	<p><input type="checkbox"/> Yes, I can easily complete all of these tasks.</p> <p><input type="checkbox"/> No, I still need practice to complete some of these tasks.</p>
<b>Navigate the internet to find what they need</b> (branching skills)	<p><i>Can you easily find answers to questions using the internet? e.g., business hours for a bank, directions, recipes</i></p> <p><i>Can you schedule appointments online? e.g., doctor appointments, dentist appointments</i></p> <p><i>Can you easily find news online?</i></p>	<p>Yes, I can easily complete all of these tasks.</p> <p>No, I still need practice to complete some of these tasks.</p>
<b>Process large amounts of information at once</b> (real-time thinking skills and working memory)	<p><i>Can you remember and follow multiple steps to complete a task on a device? e.g., navigate to Google Docs to open a file and/or create a new document, open Microsoft Word and find a template to draft a resume</i></p> <p><i>If you aren't sure how to do something on a device, can you usually figure out how to do it on your own? e.g., watching a video online, researching how to do something, trying different ways</i></p>	<p><input type="checkbox"/> Yes, I can easily complete all of these tasks.</p> <p><input type="checkbox"/> No, I still need practice to complete some of these tasks.</p>

<p><b>Find, sort through, and evaluate information in order to use it</b> (information literacy)</p>	<p><i>Can you use key search terms to find what you are looking for online?</i></p> <p><i>Can you decide between relevant and non-relevant information online and select the information that will be most useful to you?</i></p> <p><i>Can you file information on your device in a way that makes it easy to find again later? e.g., naming files, folder organization, bookmarking</i></p>	<p><input type="checkbox"/> Yes, I can easily complete all of these tasks.</p> <p><input type="checkbox"/> No, I still need practice to complete some of these tasks.</p>
<p><b>Be a discerning, engaged consumer of information</b> (digital citizenship )</p>	<p><i>Can you use strategies to decide if an online resource is reliable or trustworthy?</i></p> <p><i>Can you manage the privacy settings on your device?</i></p> <p><i>Do you know about and use strategies to be safe online?</i></p> <p><i>Do you know what a digital footprint is and how you can manage one?</i></p>	<p><input type="checkbox"/> Yes, I can easily complete all of these tasks.</p> <p><input type="checkbox"/> No, I still need practice to complete some of these tasks.</p>

## LINKING THEORY TO PRACTICE | 3

Digital literacy is developed through practice. For mastery, learners need dedicated opportunities to experiment with new computer skills. Building scenarios for learners to try out new skills with a partner will support them in growing their capacity for problem solving and asking for assistance from teachers and peers.

By experimenting on a device, learners are expanding their confidence to try a skill on their own. Allow learners space to explore digital literacy skills with a partner without step-by-step guidance from the teacher. The **How to Facilitate Pair Explore** guide provides language and tips to support learners in developing their cognitive flexibility and digital literacy resilience.



### How to Facilitate Pair Explore

Teacher guide to support Pair Explore in the Digital Literacy Classroom

#### Setting Up Pair Explore

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If your class isn't accustomed to working in pairs, you may want to have a discussion about the benefits of pair work in a digital literacy classroom.

#### Sample Class Discussion on the Benefits of Pair Explore

**Teacher shares with learners:** "We are going to do some practice with a partner. This practice is called 'Pair Explore.' **Why do you think it could be a good idea to practice on the computer with a partner?"**

**Teacher asks the class to share their answers:** Example learner answers may include: *to share ideas, to practice speaking about computer skills, to help one another, to encourage each other, to be brave, to try new things on a computer.*

**Teacher shares with learners the benefits of Pair Explore:**

- When you practice with a partner, you can also share what you know.
- Most people learn computer skills from other people—by talking to other people, and trying the skills on their own!
- When you practice talking to people about technology—you learn how to ask and learn from others.
- Technology is always changing, so we always need to be learning from each other.

#### Suggestions for Pairing Learners

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- Plan to pair **two learners on one computer** for Pair Explore. This can be helpful for learners to support each other while exploring a skill.
- You may choose to assign one learner as the *computer leader*, and one learner as the *task manager*. The *computer leader* is in charge of navigating the keyboard and mouse, while the *task manager* gives direction.
- You may choose to pair learners at different digital literacy levels. For example, sometimes it may be beneficial to pair a higher-level digital literacy learner with a lower-level learner for support and coaching.
- At other times, you may want to pair learners with similar digital literacy abilities; this way, both learners will be equally engaged in the Pair Explore.

# How to Facilitate Pair Explore

Teacher guide to support Pair Explore in the Digital Literacy Classroom

## Supporting Pair Explore

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- Share with learners that instead of directly helping them, you will practice supporting them to find the answers with their partner.
- Share the questions and sentence prompts “[Asking for and Giving Suggestions](#)” with learners. You may choose to hand this sheet out to the class, post these questions and prompts in your classroom, or write them on the board.
- Plan time to go over the “[Asking for and Giving Suggestions](#)” sheet with your class to familiarize them with the language supports.
- Teachers should also plan to use the questions and prompts in the “[Asking for and Giving Suggestions](#)” to support learners to explore the computer during Pair Explore.

## Asking for and Giving Suggestions

**Pair Explore** : Use these questions and sentence prompts **to give and get help** in your computer class. Teachers **and** Learners can use these.

Asking for Ideas	Giving Suggestions
<ul style="list-style-type: none"><li>● What do you think we should do?</li><li>● What else could we try?</li><li>● Any ideas?</li><li>● What are we trying to do?</li><li>● Do you see anything here that might help us?</li></ul>	<ul style="list-style-type: none"><li>● I think we should.....</li><li>● I don't think we should.....</li><li>● Maybe you should.....</li><li>● I think we need to.....</li><li>● I don't think we need to.....</li><li>● Maybe we need to.....</li><li>● What if we.....</li><li>● Why don't we....</li><li>● How about if you.....</li><li>● See what happens if you....</li></ul>

“Asking for and Giving Suggestions” written by Jessica Jones, Lead ESL Teacher, [Literacy Minnesota](#)

## LINKING THEORY TO PRACTICE | 4

How can those supporting adult learners create helpful, equitable instruction that addresses the specific needs and concerns of each learner?

Planning leads to effective instruction. **Check out [Steps to Help Learners See Practical Outcomes in Digital Literacy](#)** as a tool to get started.



### *Steps to Help Learners See Practical Outcomes in Digital Literacy*

<p><b>Before Instruction</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Become an expert, review the content you plan to teach prior to the session.             <ul style="list-style-type: none"> <li><input type="checkbox"/> Take <a href="#">Northstar Digital Literacy Assessments</a> on a topic you're planning to teach to review your own skills in that area.</li> </ul> </li> </ul>
<p><b>Warm-up</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Introduction: Take time to learn learners' names and how to correctly pronounce them.</li> <li><input type="checkbox"/> Suggested warm-up questions: <i>How often do you use a computer? What are your goals, why are you taking computer class? Have you taken computer classes before? What do you want to work on today? What computer skills have you practiced before? What do you want to be able to do on a computer?</i></li> </ul>
<p><b>Pre-Assessment</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Consider having learners take a <a href="#">Northstar Digital Literacy Assessment</a>. These are free interactive digital literacy tests, available online that allow test takers to demonstrate basic computer &amp; digital literacy skills. They provide a report of skills mastered and skills needing improvement.</li> <li><input type="checkbox"/> From the Northstar report, identify specific digital literacy skills learners need to improve in a topic area.</li> </ul>
<p><b>Goal Set</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Together, set goals of 1-3 digital literacy skills to work on for a tutoring session. The <a href="#">Northstar Digital Literacy Standards</a> are also an excellent resource to identify skills learners may need to work on in a topic area. Discuss standards/goals in learner friendly language.</li> </ul>
<p><b>Tutoring Session</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Plan lessons to move through each goal with the learner/s.</li> </ul> <p>Here are some digital literacy curricula developed specifically for adult learners:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Northstar Digital Literacy provides a <a href="#">webpage</a> with links to a variety of publicly available learning resources that may support additional practice with digital literacy skills in many topic areas.</li> </ul>

	<ul style="list-style-type: none"> <li data-bbox="602 205 1323 359">☐ <a href="http://GFCLearnFree.org">GFCLearnFree.org</a> a website created by the Goodwill Community Foundation containing many free tutorials on computer software including Microsoft Office, email, basic computer use, and using the internet.</li> <li data-bbox="602 407 1323 678">☐ <a href="#">Northstar Digital Literacy</a>, a program of <a href="#">Literacy Minnesota</a>, also offers a robust curriculum and online interactive learning modules available to subscribers. Lesson plans are written for all instructors including experienced teachers and volunteers. Topics include Basic Computer Skills, Using Email, Internet Basics, and Google Docs.</li> </ul>
<b>Wrap Up</b>	<ul style="list-style-type: none"> <li data-bbox="602 716 1323 852">☐ Suggested closing questions: <i>What did you learn today? What is one thing that you learned that will help you meet your goal? Let's look at our goals again. Did we accomplish our learning goals today?</i></li> </ul>

## LINKING THEORY TO PRACTICE | 5

Performing effective internet searches is a key digital literacy skill. Check out the **Sample Northstar Digital Literacy Curriculum Lesson Plan**. (For more information about Northstar digital literacy assessments and curriculum focusing on basic digital literacy, visit **Northstar Digital Literacy**. [↗](#))



### Internet Basics, Lesson: Search Terms

Northstar Digital Literacy Standards <i>This lesson aligns with the following standard/s.</i>	Vocabulary <i>This lesson focuses on the following digital literacy terms.</i>
12. Perform internet search using clear parameters (terms and filters).	address bar                      search terms images search bar search engine

Technology Concepts <i>Important lesson background and teaching tips for instructors</i>
<p>In this lesson, learners will practice writing <b>search terms</b> in order to find accurate and relevant information. They will practice changing questions into <b>search terms</b> by including content words and excluding irrelevant grammatical words, i.e. <i>the, of, on</i>, etc.</p> <p><b>Teaching Tips:</b></p> <ul style="list-style-type: none"> <li>• Be sure to point out the auto-complete feature, as it can save time while writing <b>search terms</b>. Some learners may not notice the auto-complete, which finishes a <b>URL</b> for a site you have previously visited, i.e., when I type 'go', the computer fills in 'google.com'. Encourage learners to stop typing after a few letters and see what websites appear in the auto-complete.</li> <li>• While this lesson is based on Google and Google Chrome, it should be applicable to other <b>search engines</b>/browsers. If you choose to teach another <b>search engine</b>/browser, confirm everything operates the same before teaching the lesson.</li> <li>• In Google Chrome, and most other browsers, the <b>address bar</b> (where you type web addresses) can also function as a <b>search bar</b>. Have learners practice using both the <b>address bar</b> and <b>search bar</b> to type <b>search terms</b>.</li> </ul>

Teacher Prep Guide <i>Follow these steps to prepare for teaching this lesson</i>	
General Prep	<input type="checkbox"/> Confirm answers for <a href="#">Handout A</a> .
Do It Together 2	<input type="checkbox"/> Copy <a href="#">Handout A</a> for each learner.
Task	<input type="checkbox"/> Copy <a href="#">Handout B</a> for each learner.
Vocabulary Work	<input type="checkbox"/> Copy <a href="#">Handout C</a> for each learner.

## Warm Up

Find out what learners know and prime them for the work ahead.

### Pair/Small Group Work (Think-Pair-Share):

→ Directions: Give two minutes to think about questions projected on screen, then discuss in pairs for two minutes, and finally share together as a class.

- ◆ Have you used Google to search for information on the internet?
- ◆ If yes, what did you search for?
- ◆ If no, what do you want to search for on the internet?

## We will Learn...

Sharing learner-friendly objectives helps set goals for today's learning.

List objectives on board or project. Read through them together to set goals for today's learning.

### We will learn to:

use a **search engine** (Google) to find information on the internet.

write clear **search terms** in the **search bar**.

## MODEL & EXPLAIN 1

Teacher models and explains (thinks aloud) to complete a digital literacy task while learners observe. To help learners focus on the demonstration, they should not work on their own computers at this time.

### Search Engines and Search Bars

- Say to learners:
- ◆ "Sometimes, when you use the internet you need to find information, but don't know where to find the information you need. For example, if you need to apply for a driver's license, but don't know the web address where you can apply, you can use Google (or another **search engine**) to find it."
  - ◆ "A **search engine** helps you to find websites. Google is a popular **search engine**. There are many others. You can type the important words in the **search engine** to help you find what you are looking for."
- Project and show to learners:
- ◆ Open Google.
  - ◆ Write 'apply driver's license [your state or city]' in the **search bar**.

- ◆ Open the corresponding website.
- Say to learners:
  - ◆ “There are two places where you can write words to help you find information.”
- Show learners:
  - ◆ The main **search bar**.
  - ◆ The **address bar**.
  - ◆ Write the same search in both places to show they give the same result.

## DO IT TOGETHER 1

*Teacher asks the class to restate the steps to complete the digital literacy skill modeled. This time, the teacher prompts with questions to learners.*

- Ask learners:
  - ◆ “Where can you type words to help you find information?” (**search bar**).
  - ◆ “How many **search bars** are on Google’s website?” (two).
- Project and show learners the two search bar options in Google again.

## MODEL & EXPLAIN 2

*Teacher models and explains (thinks aloud) to complete a digital literacy task while learners observe. To help learners focus on the demonstration, they should not work on their own computers at this time.*

### Search Terms

- Say to learners:
  - ◆ “The words you type in the **search bar** are called **search terms**. For example, my **search terms** before were “apply driver’s license [your state or city]”.
  - ◆ “**Search terms** should be simple, clear, and have only important words.”
  - ◆ “For example, to learn who the president of South Korea is, you only need to write ‘president South Korea’.
- Show learners:
  - ◆ Type ‘president South Korea’ in the **search bar**.
  - ◆ Type ‘who is the president of South Korea’ in the **search bar** to show they bring the same result.
- Say to learners:
  - ◆ “On Google, you can also search for **images** (pictures), maps, or news.”
- Search for and show learners an **image** of the president of South Korea and a map of South Korea.

## DO IT TOGETHER 2

Teacher asks the class to restate the steps to complete the digital literacy skill modeled. This time, the teacher prompts with questions to learners.

- Give [Handout A](#) to learners, which has a list of questions.
- On the board or a projected Word document, type the following question:
  - ◆ “What is the time in Mogadishu?”
- Say to learners:
  - ◆ “To find the time in Mogadishu, you need to type some of these words, but not all of them. What important words should you keep? Which ones can you get rid of?”
- Go through each word in the question and ask:
  - ◆ “Do you need to type the word ‘what’?” (learners answer “no”).
  - ◆ “Do you need ‘is’?” (no).
  - ◆ “Do you need ‘time’?” (yes).
  - ◆ “Do you need ‘Mogadishu’?” (yes).
- As learners answer, cross off/delete unnecessary words on the board or projected Word document. On [Handout A](#), learners should also cross off unnecessary words in the questions.
  - ◆ Ex: “~~What is the~~ time in Mogadishu?”
- Then, learners should write the simplified **search terms** into the blank (time Mogadishu).
- Complete question 2 as a class.
- Then, learners work in pairs to finish writing **search terms** for questions 3-4.
- Learners work in pairs to write 2 original questions and **search terms**.
- Learners should not type **search terms** into Google at this point.

## PAIR EXPLORE

Teacher has modeled the skills, and skills have been practiced together. Now, allow learners time to explore these skills with a partner **without step-by-step guidance from the teacher**. \*Refer to the “How to Facilitate Pair Explore” for teacher support.

- In pairs, learners enter the **search terms** from [Handout A](#) into Google.
- Learners write the answers in the blank column next to the questions.
- Support learners’ searches as needed.

## Task

Learners practice skills by completing an authentic task/s.

- Give learners [Handout B](#).
- Learners pick a country to research. Using Google, they will answer the questions on [Handout B](#).
- Model how to complete the task by completing the first 1-2 questions together while projecting a computer screen.
- As learners finish, encourage them to search for **maps** and **images** of the country.

## Vocabulary Work

Learners practice vocabulary presented within the lesson.

- Give [Handout C](#) to learners.
- Learners use vocabulary from the lesson to label a Google window.
- Answers:
  1. search bar
  2. search terms
  3. news
  4. images
  5. search bar
- Check answers together as a class.

## Wrap-Up

A final check-in with learners. An opportunity to review, reflect, or check for understanding.

### Pair/Small Group Work (Think-Pair-Share):

- Teacher reads each statement aloud one-by-one. Give learners a moment to think about the statement you read, then discuss it with a partner, and finally read the statement again so the class can answer it together.
  - ◆ The \_\_\_\_\_ is a place to write **search terms (search bar)**.
  - ◆ Google has \_\_\_\_\_ **search bars** on the main page (two).

# Handout A



## Writing Search Terms

Directions: Cross off words you don't need. Then, write the search terms under the question.

Questions	Answers
Question 1: What is the time in Mogadishu? Search terms: _____	
Question 2: What is the weather in Bangkok today? Search terms: _____	
Question 3: How much sugar is in a can of Coke? Search terms: _____	
Question 4: What is the capital of Uruguay? Search terms: _____	
Question 5: _____ Search terms: _____	
Question 6: _____ Search terms: _____	

## Handout B



### Research a Country

*Directions: First, choose one country to research. You can pick any country, here is a list of suggestions. Then, use Google to answer the questions.*

Japan	Finland	Ethiopia	Colombia
Egypt	Thailand	Italy	Mexico

What country are you researching? \_\_\_\_\_

1) What is the capital of the country?

\_\_\_\_\_

2) What is the population?

\_\_\_\_\_

3) What language (or languages) do they speak?

\_\_\_\_\_

4) What are some popular foods in the country?

\_\_\_\_\_

5) Who is the president or prime minister?

\_\_\_\_\_

6) Who is a popular singer in that country?

# Handout C



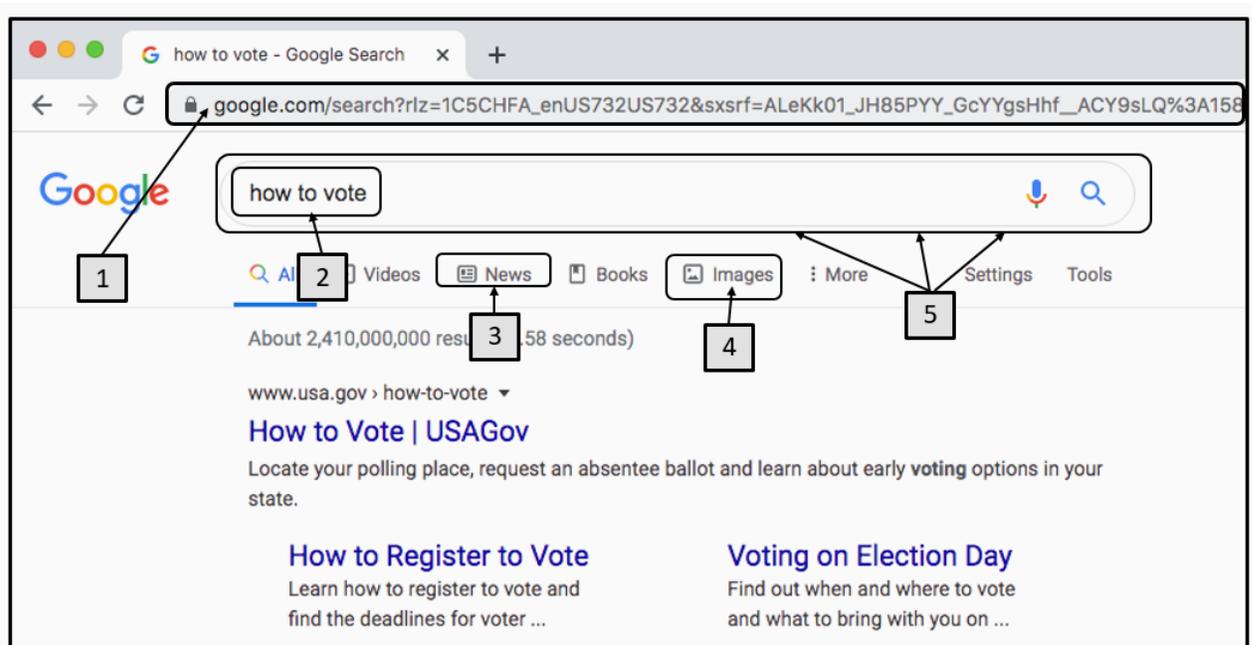
## Search Vocabulary

Directions: Fill in the blank with the vocabulary word that matches the numbered object in the picture.

### Vocabulary Words:

address bar	search bar	search terms	news	maps
-------------	------------	--------------	------	------

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_



## LINKING THEORY TO PRACTICE | 6

Introduce learners to these strategies to assess reliability of online sources.

### **Strategies to Assess Source Reliability**

Review the website. Try each strategy, look for clues, think about what the clues mean, and then summarize your findings. Lastly, ask yourself: is the source reliable or not?

Strategy: What to do?	Clues to look for?	What clues did you find?	If you find the clues, what does it mean?
1. Scan the website	Typos, misspelled words, all capital letters.	<input type="checkbox"/> Typos <input type="checkbox"/> Misspelled words <input type="checkbox"/> All CAPS	Less reliable websites are not as professional.
2. See who made the website	Look for the author's name and what organization they are connected to.	<input type="checkbox"/> Author's name <input type="checkbox"/> Organization <input type="checkbox"/> Author or organization have/has experience on this topic	This can determine if the article is written by a trained or experienced person. Knowing something about who wrote the article can also help you think about their purpose or goal for writing.
3. Read the website URL	The top level domain to determine the objective of the website.	<input type="checkbox"/> .edu <input type="checkbox"/> .gov <input type="checkbox"/> .com <input type="checkbox"/> .org	Edu and Gov are usually more reliable because only schools and governments can have these websites. Com and Org can be owned by anyone. Com websites may be trying to sell you something.
4. Identify the purpose	Find if the article was written to persuade, inform, or entertain.	<input type="checkbox"/> persuade <input type="checkbox"/> inform <input type="checkbox"/> entertain	This can help you determine if the author is trying to push you to do something, give information, or simply to have fun.
5. Identifying fact vs. opinion	Look for specific words to identify opinions like good, best, and worst, and words like never, always, probably, and should.	<input type="checkbox"/> mostly fact <input type="checkbox"/> mostly opinion	Anyone can post on the internet. Knowing when something is fact or true is important to decide if the information is reliable or not.
6. Check the date	Find the date the website was published.	<input type="checkbox"/> recent date of publication <input type="checkbox"/> older date of publication <input type="checkbox"/> no date	Older websites may be less reliable! Information changes.

**Decide: Is the source reliable or not? What clues helped you make this decision?**

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