

# FY2018 Technology Initiative

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## TECHNOLOGY POINT PERSON GUIDE



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## TECHNOLOGY POINT PERSON

The role of the Technology Point Person (TPP) is an important position for an Aspire program's goal of developing students who can successfully navigate the digitally connected world and use technology to learn, communicate, and create. In this role, TPPs assist program staff in identifying their technology needs and developing plans to integrate technology for in-class use, blended learning, and distance education. New for this year is the adoption of the Northstar Digital Literacy Standards for Aspire teachers and students. The standards and assessment are free and require no additional purchasing to utilize. In addition to working with program staff, TPPs can assist in developing students' technology skills in preparation for computer based assessments, distance education, postsecondary training or education, and the workplace.

## GUIDING PRINCIPLES FOR TECHNOLOGY

To maintain a commitment to technology in Aspire programs, several guiding principles should be followed by staff to ensure responsible use and continuous learning.

- Aspire staff understands basic legal issues and appropriate use of the Internet and Digital Communication.
- Aspire staff can select, incorporate and evaluate the use of technology in the program and classroom.
- Aspire staff can use computer-based assessments and software, where applicable.
- Aspire staff is knowledgeable of means to make technology accessible for adults with special needs.
- Aspire staff can model lifelong learning in technology.
- Aspire staff will participate in professional development related to technology.

## NORTHSTAR DIGITAL LITERACY STANDARDS

The Northstar Digital Literacy Standards were originally conceived from a partnership between the Saint Paul Public Library and Saint Paul Community Literacy Consortium leading to the creation of an assessment to quantify digital literacy knowledge among lower-skilled adults, including displaced workers who might lack such skills. Today, there are over 300 sponsored sites administering the assessment and over 1,600,000 assessments have been completed for free on their website. The standards and assessment can be viewed using the links below.

<https://www.digitalliteracyassessment.org>

<https://www.digitalliteracyassessment.org/history>

<https://www.digitalliteracyassessment.org/standards>

Why are the Northstar Digital Literacy Standards being adopted? WIOA includes digital literacy instruction in the list of workforce preparation activities. WIOA references the Museum and Library Services Act of 2010, which defines digital literacy as “the skills associated with using technology to enable users to find, evaluate, organize, create, and communicate information.”

<https://www2.ed.gov/about/offices/list/ovae/pi/AdultEd/integrating-technology.pdf>

The CCR Standards includes information/media literacy elements as well as using technology to create, collaborate, communicate, and research.

Reading CCR Anchor 7: Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

(Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears. (RI.4.7))

(Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. (RI.5.7))

(Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text. (RH.9-10.7))

Writing CCR Anchor 6: Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

<http://lincs.ed.gov/publications/pdf/CCRStandardsAdultEd.pdf>

The Program for the International Assessment of Adult Competencies (PIAAC) data shows significant number of adults lack basic problem solving skills in technology rich environments (PS-TRE). This is overwhelming true for lower level students. An example task of the PS-TRE assessment where the learner takes the role of a job seeker conducting a search online and the full PIAAC report can be viewed at the links below.

<http://www.oecd.org/skills/piaac/Problem%20Solving%20in%20TRE%20Sample%20Items.pdf>.

[http://www.oecd.org/skills/piaac/PIAAC%20Framework%202012--%20Revised%2028oct2013\\_ebook.pdf](http://www.oecd.org/skills/piaac/PIAAC%20Framework%202012--%20Revised%2028oct2013_ebook.pdf)

Programs may choose to implement the Northstar Digital Literacy Standards and Assessments in a variety of ways depending on the needs and goals of their students. The standards are a general baseline measure of the skills necessary to be considered digitally literate. The assessment can be used as a screening tool for students entering a program. It can be used to test students for computer skills certificates. It can be used by learners and instructors to evaluate their own technology strengths and identify areas for improvement.

The Northstar Digital Literacy Standards includes 10 areas:

1. Basic Computer Skills
2. World Wide Web
3. Windows
4. Mac OS X
5. Email
6. Word
7. Social Media
8. Excel
9. PowerPoint
10. Information Literacy

Of the 10 areas available, 9 are included in the adopted standards. Mac OS X was not included on the list as it only holds a small share of the operating system market (<https://www.netmarketshare.com/operating-system-market-share.aspx?qprid=10&qpcustomd=0>).

The areas can be broken into four clusters for students: Basic Skills, Internet and Communications, Productivity Software, and Information Literacy. For each cluster, there are recommended and optional skill assessments. The recommended areas are the basic core skills for operating a computer, getting online, and using word processing software. The included optional areas advance beyond the basic levels and represent areas that are important for post-secondary success and transitioning to employment opportunities. Windows was included as optional due to the multiple versions of the operating system currently supported (Windows 7, 8, 10), as well as the adoption of Chromebooks by many programs.

## **BASIC COMPUTER SKILLS**

The two areas included in Basic Skills are the core elements of operating a computer. Learners at this stage will be getting familiar with hardware basics, terminology, and interacting with an operating system.

### **Basic Computer Skills (Recommended)**

1. Tell the difference between a desktop and laptop computer.
2. Identify parts of a computer.
3. Plug in headphones correctly.
4. Identify a mouse and a touchpad.
5. Identify mouse pointers.
6. Demonstrate understanding that mice can be customized.
7. Demonstrate understanding that it is possible to customize a computer for increased accessibility.
8. Demonstrate understanding that software programs are upgraded periodically.
9. Identify storage media.
10. Demonstrate knowledge of keys on a keyboard.
11. Turn a computer and monitor on and off.
12. Log on to a computer.
13. Double click and right click.
14. Drag and drop.
15. Use a mouse to select check boxes, use drop-down menus, and scroll.
16. Adjust volume and mute audio.
17. Identify icons on a desktop.
18. Use the recycle bin for trashing and retrieving items.

### **Windows (Optional)**

1. Identify the operating system used by a computer.
2. Demonstrate knowledge of the Windows Start menu.
3. Identify drives on a computer.
4. Access the help menu.
5. Use 'Search' to locate a file, program, or document.
6. Identify and demonstrate knowledge of basic office software programs. Identify their corresponding file extensions.
7. Identify the desktop.

8. Identify the taskbar.
9. Minimize and maximize windows.
10. Open and exit programs.
11. Open, close and switch between windows.
12. Demonstrate knowledge of Windows file organizational system.
13. Delete documents or files.
14. Shutdown, restart, and log off a computer.

## INTERNET AND COMMUNICATION TECHNOLOGY

The three areas focus on the skills necessary for getting online, navigating the web, and communicating using email and social media. In addition to the computer skills necessary, these standards also include how to stay safe online and etiquette for communication.

### **World Wide Web (Recommended)**

1. Identify an Internet Service Provider and ways to connect to the Internet.
2. Demonstrate knowledge of browsers and identify commonly used browsers.
3. Identify a website.
4. Identify a homepage.
5. Identify common domain types.
6. Demonstrate knowledge of ways to increase Internet safety for children.
7. Demonstrate knowledge of antivirus software.
8. Avoid providing financial information unless on a secured website.
9. Correctly enter a security code.
10. Fill out an online form.
11. Identify the address bar and enter a URL address.
12. Identify browser toolbar buttons and use them correctly.
13. Identify search engines and enter search terms into the search engine.
14. Use scroll bars.
15. Use a hyperlink to access other webpages.
16. Create a new tab, open a webpage in a tab, and move between tabs.
17. Identify a pop-up window and close it.
18. Enable an individual pop up window.

### **Email (Recommended)**

1. Define email.
2. Tell the difference between a URL and an email address.
3. Register for a new email account.
4. Log into email.
5. Address an email and create an email message. Then, Send an email.
6. Open an email and reply to all.
7. Forward an email.
8. Add an attachment to an email.
9. Open an attachment in an email.
10. Delete an email and retrieve an email from the trash.
11. Understand basics of email etiquette.
12. Use caution when opening an email from an unfamiliar source.
13. Avoid giving out personal information to unfamiliar people.
14. Identify and delete junk mail, including spam.

15. Be selective and cautious about forwarding email to large groups of people.
16. Sign out of email.
17. Define computer virus

### **Social Media (Optional)**

1. Identify different types of social media and their primary functions (Facebook, LinkedIn, Twitter).
2. Create a new account on a social media network.
3. Recognize information posted by others or online or on social media networks that may present a risk to you (user as consumer of information).
4. Demonstrate knowledge of managing "friends" on Facebook: adding friends or accepting/declining "friend" requests.
5. Demonstrate an awareness that social media accounts have privacy settings that can be set by users.
6. Demonstrate an understanding of the consequences of "liking" something.
7. Share content by uploading media.
8. Identify information that is unwise to post and/or upload on a social media (too much personal sharing, inappropriate photos/comments) (User as publisher of information).
9. Distinguish between public and private "spaces" on social media sites (ex: Facebook messages and Facebook wall).
10. Post, share, like or comment on content.
11. Demonstrate knowledge of the permanence of anything posted on the internet.

## **PRODUCTIVITY SOFTWARE**

The three areas included are the common suite of tools used most frequently in many workplace and postsecondary settings. The standards are written for the Microsoft Office suite of productivity software, but can also be applied to other products like Google Docs.

### **Word (Recommended)**

1. Open a new or existing document.
2. Identify the Ribbon.
3. Use Save As to save to a particular folder and name the document.
4. Identify file extensions.
5. Use Spelling and Grammar check.
6. Format the size, color and type of font.
7. Set single or double spacing.
8. Align text.
9. Use bullets and automatic numbering.
10. Use the Undo button.
11. Cut, copy and paste.
12. Set margins.
13. Select portrait or landscape.
14. Demonstrate knowledge of the difference between "Save" and "Save As" functions.
15. Print.
16. Save and close a document.

### **Excel (Optional)**

1. Open a workbook.
2. Identify parts of Excel Screen: ribbon, formula bar, active cell, name box, column letter, row number.
3. Locate a cell.
4. Identify sheet tabs, create a new tab, and rearrange tabs.
5. Name worksheets.
6. Create headings and freeze them.
7. Format cells: bold, underline, size, merge and center, wrap text, number (currency, time, percentages, etc.)
8. Adjust rows and columns.
9. Enter data in a cell.
10. Copy and move cell entries.
11. Choose page orientation.
12. Select a print area and print.
13. Save and name workbook.
14. Insert and delete rows and columns.
15. Write a formula in the formula bar (-, +, \*, /).
16. Use Auto Fill.
17. Use AutoSum (Sum, average, etc.).
18. Select a range.
19. Sort data (least to greatest, alphabetically, etc.).
20. Create a graph using data.
21. Save and close workbook using the quick access toolbar.

### **PowerPoint (Optional)**

1. Open a new or existing PowerPoint presentation.
2. Identify parts of the PowerPoint Screen: slide navigation pane, slide pane, notes, the ribbon, quick access toolbar, and scroll bars.
3. Insert new slides, duplicate, or reuse slides.
4. Manage text (insert, delete, copy, cut and paste, drag and drop, format, and use spellcheck).
5. Apply or change a theme.
6. Use zoom control.
7. Insert items into a presentation, resize, and adjust them (video, chart, pictures, clip art, screenshots).
8. Add a textbox, adjust it, resize it, or delete it.
9. Change the view of slides (normal, slide sorter, reading view, slideshow view).
10. Insert, delete and move slides using slide navigation pane.
11. Use the quick access toolbar.
12. Apply and customize slide transitions (select, preview, add sound, automatic advance).
13. Understand the basics of PowerPoint etiquette (limited text, text that stands out on background, clear titles)
14. Play a slideshow, advance through the slides, and end slideshow (using screen toolbar features).
15. Save a presentation as a .ppt, .pdf, .png, etc.
16. Create handouts.
17. Print a presentation.

## INFORMATION LITERACY

The standards included take the foundational computer skills addressed in the previous areas and apply them to contexts where learners use technology to locate, evaluate, and use information effectively.

The American Library Association defines "information literacy" as a set of abilities requiring individuals to "recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information.

<http://www.ala.org/acrl/standards/informationliteracycompetency#1>

### Information Literacy (Optional)

1. Define a problem, formulate a question, or identify a decision that needs to be made.
2. Identify purpose for accessing information; how the information will help solve the problem, answer the question, help to make a decision, help with accomplishing a goal or objective.
3. Define the kind of information needed to complete the task.
4. Identify different types and formats of information found online (articles, databases, images, videos, etc.).
5. Plan steps required to solve the problem or accomplish the task.
6. Recognize the costs, in time or money, and benefits of accessing different sources of information (article, newspaper, consumer reports).
7. Demonstrate use of efficient search strategies to locate varied resources, including refining search to hone in on relevant information found in a previous search.
8. Locate potentially relevant information in media found online, including text, video, images, etc. Locate the source of the information.
9. Make use of hyperlinks to follow desired/required path of information.
10. Demonstrate basic understanding of use of non-Internet sources of information (personal documents, Excel spreadsheet, etc).
11. Discern between relevant and non-relevant information in an information source and select the information that addresses the issue that motivated the search.
12. Determine the quality of information by identifying bias, assessing the reliability of sources, and identifying the impact of context.
13. File/store information in a format that facilitates ease of access for future use (e.g., file naming, folder organization, bookmarking, etc.)
14. Monitor extent to which information solves a problem and know when additional information is needed.
15. Synthesize relevant information from one or more sources.
16. Integrate new information into current knowledge and use it to support understanding, views, perspectives, or opinions.
17. Act on information to solve basic problems or answer a question.
18. Select appropriate format for sharing information, based on audience and purpose, and distribute to intended audience.
19. Evaluate the result of gaining/using the information. Was the question answered? Was the problem solved? Was a better decision made? Was a goal or objective met?



## NORTHSTAR DIGITAL LITERACY ASSESSMENT

The Northstar Digital Literacy Assessment was developed in conjunction with the standards to offer a web-based system for assessing digital literacy skills. Please note that all of the assessment can be accessed for free on their site found at <https://www.digitalliteracyassessment.org/#cta-module-launch>. No purchase is necessary to utilize this resource. When using the free site, the tests can be administered without an account and a print out of the assessment results will be generated upon completion. Alternative versions of the assessment are available for Windows 7 and 10, as well as Microsoft Office 2010 and 2016.



For Chrome browser user, please note the message about enabling Flash. Google has disabled Chrome in recent versions of the software and will need to be enabled manually.

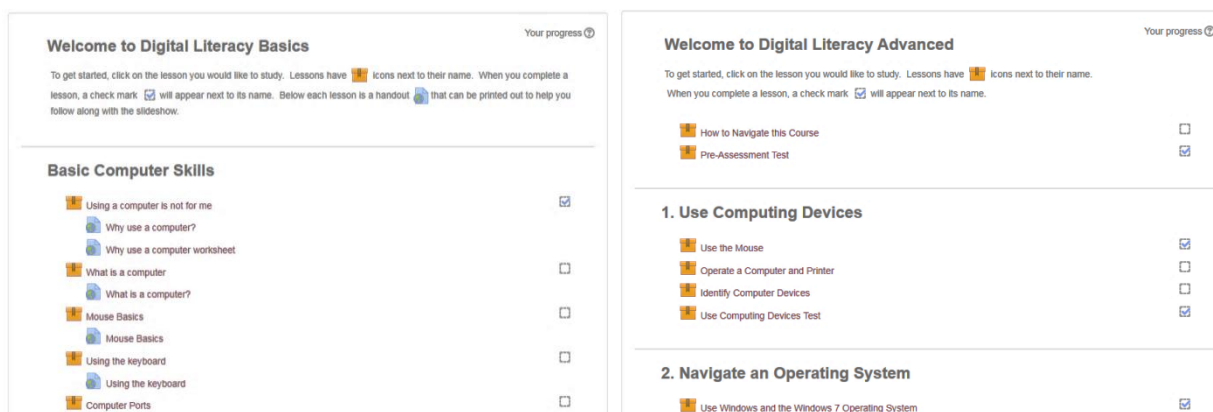
It's hard for us to be 100% certain, but your browser *might* have Flash disabled, which would mean you can't take Northstar assessments until it's enabled. **We can fix that!** First, [open one of our assessments](#) to check whether the screen loads successfully. If it does, that means you already have Flash enabled, and you have nothing more to worry about - you may click the "Don't show this again" button below.

If instead, you get an error message or are redirected to Adobe's site explaining the need to install Flash, there's a couple things to consider: if you're using the Google Chrome browser, please [read our announcement](#) about Google's updates to Chrome and how to re-enable Flash (no separate download required). If you're not using Chrome, please [see Adobe's help page](#) for more information or [contact us](#). Sorry for the inconvenience! We're working to make Flash unnecessary for Northstar assessments in the future.

## DIGITAL LITERACY COURSES ON THE LEARNER MOODLE

Two courses have been installed on the Learner Moodle for developing digital literacy skills. The first course is appropriate for lower level learners with limited to no computer experience. Modules in the basic course last less than 5 minutes and full transcripts of the audio can be printed off as handouts. The

second course is more appropriate for students that have some basic computer skills and are able to build on that existing foundation. The course begins with a pretest and most modules will take up to 30 minutes to complete. Upon completing the area modules, a post test is available for students to check their understanding.



Students who already have an account on the Learner Moodle can enroll themselves in the course directly. If you or another instructor would like information on how to access to the Learner Moodle, please contact [de@literacy.kent.edu](mailto:de@literacy.kent.edu).

## DIGITAL LITERACY CURRICULUM

Lesson plans and curricula aligned to the Northstar Digital Literacy Standards have already been created and can be adapted as needed. The RIFLI Computer Skills curriculum was designed to meet the needs of English Language Learners. It moves at a slower pace, pre-teaches vocabulary, and offers multiple opportunities for learners to practice their skills.

<http://www.rifli.org/find-resources/>

The Technology Literacy Collaborative of Minnesota has also developed curricula that align to the Northstar Digital Literacy Standards, as well as more advanced technology skills. Below are links to the main site page, as well as some sample curriculum intended for beginners.

<http://www.tlc-mn.org/curriculum/categories/digital-literacy-curriculum/>  
<http://www.tlc-mn.org/curriculum/beginning-computer-four-session-class/>  
<http://www.tlc-mn.org/curriculum/beginning-e-mail-four-session-class/>  
<http://www.tlc-mn.org/curriculum/beginning-internet-four-session-class/>  
<http://www.tlc-mn.org/curriculum/microsoft-word-2007/>

## DISTANCE EDUCATION AND BLENDED LEARNING

With more options for incorporating learning opportunities that occur outside of the classroom and student ownership of devices that enable them to access those opportunities increase, programs should develop a plan to leverage online technology for distance education and blended learning. Aspire programs have access to a number of platforms that are free minus the cost of time to learn and implement the system. This includes a simple implementation like sharing YouTube videos and quizzes through Google Classroom to provide concept review and checks for understanding to managing dozens of students on a platform like Edmentum.

To learn more about distance education and the platforms available to Aspire programs, please see the self-directed options on the training calendar under the heading Distance Education.

<http://mercury.educ.kent.edu/database/rcn/registrations/login.cfm>