Today's society thrives on the use of technology. In almost every aspect of life, technology plays a significant role in how people interact with each other. Technology also affects the ways people perform a variety of tasks. Projects and activities that might have taken a lot longer to complete five years ago are much easier and faster today thanks to technological advancement.

Regardless of your circumstances, you will likely encounter some aspect of technology in your everyday life. However, *technology* is such a broad term and can mean many different things to a variety of individuals. Before you start your technology journey, it is important to define the types of technology presented in this course.

This course talks about some prominent desktop and mobile solutions. Some of the products are mainstream solutions that are also available to your fully sighted family and friends. The course also discusses how adaptive technology solutions provide access to
mainstream hardware and software. In addition, it focuses on proprietary, adaptive technology products designed to be used specifically by persons who are visually impaired. The goal of this course is to help you identify an adaptive technology solution that meets your computer needs.

This course includes five lessons. Lesson 1 provides a framework for making informal decisions about the direction for your technological journey. Lesson 2 discusses the types of computers and peripherals that are currently available, while Lesson 3 focuses on the operating systems and applications that run computers. Lesson 4 addresses the role of adaptive technology solutions and how they work with accessing mainstream applications. Finally, Lesson 5 helps formulate a plan of action for selecting your technological solution. While this course is designed for helping students who are visually impaired, sighted family and friends can also benefit from the wealth of information in this course.

Each lesson includes section reviews, which are for your personal development only. Complete the section

Overview
reviews before going on to a new section of the course. Students who routinely do the section reviews perform significantly better on assignments. Do not send your responses to your Hadley instructor. Rather, check your comprehension by comparing your answers with those provided.

To complete the course, you are required to submit five assignments, one at the end of each lesson. Follow the instructions for submitting your assignments, which appear on each assignment page. Additional guidelines for submitting assignments are in the Getting Started instructions.

If you're ready to begin your technology journey, begin Lesson 1: Technology Self-Assessment.
Lesson 1: Technology Self-Assessment

Before exploring the scope of available desktop and mobile technologies, it makes sense to consider your current circumstances and to determine how technology can improve them. To do this, you'll establish a criteria for selecting the appropriate technology. No need to worry: You will be in control of selecting the types of technology best suited for your use.

Second, you'll establish which preferred adaptive media might be most comfortable and efficient for you to use when working with various hardware and software applications. You'll select a preferred medium for accessing information that is presented to you, as well as a medium for engaging a specific application. This means you will choose methods for entering text and issuing commands to specific programs to get the most out of the technologies you plan to use.

This lesson provides a framework for making informed decisions about the direction for your technological
journey. As you work through this lesson, you may wish to get feedback from your sighted family members, friends, and peers that will help you use technology efficiently. This lesson may also assist you with making some possibly challenging decisions about the types of media you choose to use when learning a given technology solution. Selecting the appropriate technology for your circumstances will help you identify an adaptive technology solution that meets your computing needs.

Objectives

After completing this lesson, you will be able to
a. establish a criteria for selecting the types of technology best suited for you
b. consider which adaptive technology medium is most appropriate for you to use throughout your technology journey

Key Terms

The following terms appear in this lesson. Familiarize yourself with their meanings so you can use them in your course work.

Lesson 1: Technology Self-Assessment
**application**: a software program or group of programs that enables users to carry out certain computer tasks; examples include word processors, spreadsheets, and media players

**dial pad input**: a mode of keyboard input for users of cellular phones where the traditional dial pad is used to enter numbers, symbols, and letters into edit fields present within cellular phone applications

**hardware**: the physical parts of a computer and related devices

**mouse**: a hand-operated electronic device that controls the coordinates of a cursor on the computer screen as the user moves it around on a pad

**refreshable braille**: an electronic representation of the braille code displayed on a device that is connected to a desktop, portable, or handheld computer

**screen magnification**: a medium designed to magnify the text and images on the screen of a desktop, portable, or handheld computer

**software**: written programs, procedures, or rules, and associated documentation, that allow a computer system to operate
speech input: a mode of input that involves individuals speaking into a microphone connected to or built into a computer; the computer responds to voice commands and also inputs text by processing the words and letters spoken by the computer user

speech output: a medium that speaks the text and graphics on a desktop, portable, or handheld computer; a medium used by persons with little to no functional vision

spreadsheet: a type of computer software for performing mathematical computations on a simulated worksheet

Criteria for Your Technology Assessment

Before discussing the different types of technology at your disposal, it is important to define what sorts of technology make sense for you to use. This is not to suggest that you should ignore the numerous solutions available to you. However, by following the guidelines within this section, you'll be able to determine what types of technology might better help you as you work through Lessons 2 through 5.
The following assessment involves four questions to help you determine the types of technology that might be the most useful to you:

- What are my needs?
- What are my wants?
- What are my expectations?
- What can I afford?

If any of these questions are unclear, remember to seek input from people who know you quite well.

**What Are My Needs?**

Undoubtedly, the most important question to ask yourself when selecting your preferred technology is, "What are my needs?" So often, manufacturers of various technologies offer many product features and promise new, faster, and state-of-the-art product updates available in future releases. These features and frills will not guarantee you success when using the product in your day-to-day life if the product does not enable you to perform tasks necessary to your responsibilities on the job, in the classroom, or throughout your community. You need to determine if a specific product can meet your needs in a variety of
environments. If it cannot do this, you need to find another technological solution that is right for you.

To start, answer the first question about your needs by making a list of the duties you perform now as well as the duties you should be performing. Are you doing these tasks as independently as you would like? Are these activities related to your job, educational setting, and your home? Think of what you really need to do rather than activities relating to what you want to do. That topic will be covered later. Also, try to focus on tasks that involve the exchange of information with others, as well as activities that improve communication between you and your family, friends, and colleagues.

The following are some things to consider when making this list:

- Do you need to be mobile, or are most of your tasks performed from one particular location?
- Which tasks solely depend on technology for you to perform them?
- Would you require technology to complete a given task if you were fully sighted?
What types of technology do your friends and family use to be successful within the workplace, educational setting, or the community?

Some examples of essential tasks include the following:
- reading mail
- paying bills
- producing reports
- researching information
- taking notes
- taking messages
- providing verbal or written directions and information

In short, the technology that you choose should first and foremost meet your needs. If it does not, the next three questions will not provide the guidance you need to select a viable solution.

**What Are My Wants?**

Unlike needs, "wants" are what make technology fun and exciting. To be sure, sometimes your needs may overlap your wants. For example, the Internet might enable you to pay bills and research information, but
the Internet can also be a great source of fun. The very same skills you use to pay your bills can be used to shop for an item without having to leave the comfort of your home. Perhaps you've encountered a humorous joke or story or have a personal experience you would like to share with others. The same skills you develop to share information while at work can be used to share information among friends and family.

In the same way you have determined your needs, you identify your wants by making a list of all the different types of activities that you think require technology. Do not hold back when making this list: treat this exercise as if the sky is the limit. This is a perfect opportunity to chat with your family and friends about the fun activities they accomplish through their computers and cellular phones.

The following are some examples of wants:

- participating in online chats
- reading a book online
- text messaging using a cell phone
• listening to Internet radio stations
• keeping in touch with many people via a social network (e.g., Facebook)

Once you've completed this list, compare it with your needs. You may be surprised how many of the skills associated with both your needs and wants overlap. Making a third list with the skills relevant to both your needs and wants will serve as a springboard for you to answer the final two questions.

**What Are My Expectations?**

The effort you spend answering the first two questions will determine how easily you answer this question. For certain, if you have many needs and wants, your expectations for developing a plan for meeting them will be high. With high expectations comes great responsibility. Plan to spend a great deal of time learning about many different products. Having many technological wants and needs simply means you will need to acquire a number of technological tools to make it all happen. The more tools you can acquire, the more your wants and needs will evolve and grow.
Finding the technology to meet a fixed number of basic wants and needs usually is fairly simple. There is no right or wrong answer, and you should never feel as if your visual impairment defines how much or how little technology you should be using. Often, individuals who are visually impaired feel they must use as much technology as is available. But ask yourself, "How important is technology to me?" Then ask yourself, "How important would technology be to me if I were fully sighted?" Some tasks, such as reading a piece of mail, may require technology that is too expensive or cumbersome to be practical. Avoid overloading yourself with unneeded technology just because you are visually impaired.

Focusing on your wants and needs lets you put your technology expectations in proper perspective, and it enables you to acquire the independence you deserve, by experiencing the world on an equal footing with those who are not visually impaired. If you require state-of-the-art solutions that need to grow and expand, you may require more funding than if you simply need to purchase a solid solution for a fixed
number of tasks and activities that will not change in the coming years.

**What Can I Afford?**

This may be the most painful of the four questions you must ask yourself, and it is directly related to the growth you expect to get out of your technology. If you believe your technology journey will take many twists and turns during the next three to five years, you may want to budget a large amount of money to purchase high-end solutions that grow with you. If your budget is limited and your technology journey is more fixed and stable, then you may want to plan on replacing your lower-cost solutions, such as computers and cellular phones, more frequently. Whatever your decision, it is important to determine how you will pay for mainstream technologies such as computers, cellular phones, and the necessary adaptive software and hardware items that will make such solutions accessible to you.

You have a few different avenues for funding your technology. First, you can simply purchase it yourself. This can be difficult, depending on your wants and
needs. Keep in mind that if you have to borrow the money to make this purchase, you need to be able to pay back the money within five years or less. Most technology, whether for sighted users or those who are visually impaired, becomes fairly obsolete within five years, and it's important that you not continue to pay for something that has lost most of its value.

The following information applies to programs in the United States; however, other countries also have state, provincial, or federal programs to assist people with visual disabilities who purchase technology. In fact, there may be low-interest loan programs for technology purchases by persons who are visually impaired and choose to borrow money to buy technology.

If you are between 18 and 60 years old in the United States, many federally and state-funded rehabilitation programs would deem you to be of "working age." This status can make you eligible for assistance when purchasing technology that will make you more employable or enable you to retain current employment. Your course instructor may be able to help you locate
your local agency that can provide information about specific vocationally driven programs available to people who are visually impaired.

Also, in some circumstances your current employer or educational institution may be willing to assist you. In the case of an employer, consider demonstrating how using such a solution would make you a more productive employee. This would position the employer’s investment in such technology as a benefit for the workplace. Whenever you receive assistance for purchasing technology from a state, federal, educational, or corporate funding source, the funder sets forth rules and expectations that you will need to understand and follow before the funding is made available.

Last, a number of charitable options are available for individuals who are not quite yet employable and do not have the funds to purchase the technology themselves. Many local Lions Clubs and religious institutions are an untapped source for acquiring funding to purchase technology. Again, you'll need to make your case regarding how assistance with
purchasing such technology will improve the quality of your life as well as position you to contribute back to society.

**Section Review**

Select the best item to answer each of the following questions.

1. Which of the following describes needs?
   a. not as important as wants
   b. dependent on product features
   c. duty and task driven

   The correct answer is (c). Needs are identified by duties and tasks you are expected to perform.

2. What is the BEST strategy for identifying your "needs"?
   a. Make a list of duties you either are performing or need to perform.
   b. Ask your friends.
   c. Purchase the most powerful technology on the market to meet all your needs.

   The correct answer is (a). Needs are often driven by your duties and tasks, so make a
comprehensive list of duties where technology may assist you.

3. A task that involves the exchange of information with others might be considered which of the following?
   a. needs based
   b. wants based
   c. both (a) and (b)

   The correct answer is (c). The exchange of information is a skill that might meet the criteria of both a technology need and a want.

4. Which of the following should be done when making a list of "needs"?
   a. Determine whether you need to be mobile or can work from just one location.
   b. Select only technology that looks good to your sighted friends.
   c. Make a very short list of general needs.

   The correct answer is (a). Whether or not you need to be mobile or can work from just one location is a very important question to answer.
5. Paying bills would be an example of which of the following?
   a. a want-driven task
   b. a need-driven task
   c. none of the above

   The correct answer is (b). Paying bills is a need-driven task resulting from a need to pay the bills in a timely fashion.

6. Which of the following is an example of a task-driven technology "want"?
   a. saving a report in multiple file formats
   b. reading email from friends
   c. creating a PowerPoint presentation

   The correct answer is (b). Reading email from friends is a task that is wants-driven.

7. Some technology skills that you may develop can do which of the following?
   a. can satisfy technology needs only
   b. can satisfy technology wants only
   c. may be able to satisfy both needs and wants
The correct answer is (c). Often you will develop skills that can be transferred between both needs- and wants-driven tasks.

8. Which of the following describes the value of developing a list of technology wants and needs?
   a. It is not entirely necessary.
   b. This way, you set expectations for the technology you purchase.
   c. It requires the assistance of an adaptive technology specialist.

   The correct answer is (b). You develop expectations when you identify and prioritize your adaptive technology wants and needs.

9. Expectations often influence which of the following?
   a. how much you will spend on technology
   b. what others think about your technology skills
   c. how much money you will be able to make

   The correct answer is (a). Your technology expectations will influence your decision regarding
the amount of technology you will need to purchase.

10. Which of the following is often TRUE of government funding sources for persons who are visually impaired?
   a. They refer you to a charity to assist you if they cannot do so.
   b. Money is never an object, and funding is always available.
   c. They prioritize funding based on a person's employability.

   The correct answer is (c). Funding is made more readily available by state and federal organizations when the prospects of obtaining competitive employment are high.

Now you may have an idea of what you would like technology to do for you. The next section familiarizes you with three alternative media for interacting with technology that do not require fully functioning vision.
Selecting Your Appropriate Media

Having established the basis for selecting the types of technology most beneficial for you, it is time to consider choosing your preferred media for interacting with this technology. Regarding visual impairment, it is important to use a medium that complements any remaining functional vision that you may have. If you do not have any functional vision, then you might rely on your remaining senses to take advantage of alternative forms of audio and tactile media. This section explores these alternatives while also addressing the process of interacting with the information you have received via your preferred media. Finally, this section provides some suggestions for selecting the proper manner of obtaining and interacting with information using alternative media.

Three Types of Alternative Media

Three types of media are available to you that do not require fully functioning vision:

- magnification
- speech output
- refreshable braille
Each has distinct advantages when used effectively with either desktop or portable technologies.

**Magnification**

Persons with some remaining functional vision may consider using applications that magnify the screen of either a personal computer or a cellular phone. While these screen-magnification solutions provide a great deal of information to individuals with minimal visual impairment, they may not be appropriate for all users with some remaining functional vision. Keep in mind that screen magnification is measured by the factor of "x." This means that a screen magnified to 2x (two times) screen magnification shows only one-fourth, or 25 percent, of the original screen. A screen magnified to 3x (three times) shows only one-ninth of the screen, and a screen magnified to 4x (four times) shows one-sixteenth of the screen. Once you magnify a screen higher than 4x, it is recommended that you incorporate audio access in your methods of accessing information. Magnifying the screen is particularly tricky when working with a smaller screen on a computer or a cellular phone screen.
Description: Computer monitor showing enlarged screen text.

Credit: Photo courtesy of The Chicago Lighthouse

Speech Output

If you have limited use of vision and cannot fully take advantage of the features screen magnification offers, consider speech output. Information on either a computer or a cellular phone is read aloud by a screen reader. A screen reader provides an audio-based, nongraphical alternative to complex, graphical environments such as the Windows operating system. If you have some vision but experience a great deal of
eye fatigue or you have little to no vision, then speech output may be for you.

*Refreshable Braille*

Sometimes referred to as electronic braille, refreshable braille is often produced by a screen reader that sends electronic signals to a device that allows people to feel braille characters. This hardware provides a physical representation of braille. In addition to speaking the information aloud, the screen reader provides braille information, thus complementing the audio efforts of a speech output solution.

**Description:** A 40-pin ALVA braille display.

**Credit:** Photo courtesy of The Chicago Lighthouse
Four Modes of Input

Just as alternative media provides access to information produced by programs that run on a computer, cell phone, or both, there are several means of interacting with these applications via various methods of input:

- traditional keyboard input
- dial pad input
- braille keyboard input
- speech input

Again, depending upon the applications being used, you may wish to adopt various combinations of these input methods to suit your personal preference.

Keyboard Input

If you do not have any functional vision, using the keyboard to input text may be a viable option for you. Not only does the keyboard on a personal computer allow you to enter text, but also many key combinations can be used to navigate throughout a graphical environment such as Windows. This can be done rather efficiently and effortlessly. Many of today's cellular phones have miniature to full-sized keyboards.
that you can attach and use to navigate throughout applications, type text such as short messages, and enter phone numbers.

Description: A computer keyboard with enlarged keys.
Credit: Photo courtesy of The Chicago Lighthouse.

Dial Pad Input

This form of keyboard input is specific to cellular phones. If you have such a phone, you may enter letters, numbers, and symbols into the phone simply by using the traditional dial pad. For instance, if you were entering text via dial pad input, pressing the number 2 key twice would generate the letter b, pressing the number 5 once would generate the letter j, and pressing the number 1 repeatedly would provide a
series of symbols and punctuation marks that you might elect to use.

Description: A sample dial pad keyboard as used on a cellular phone

*Braille Keyboard Input*

A number of devices on the market today enable the braille user to enter braille text into either a desktop or portable application. Lesson 4 considers these solutions more closely. Many individuals are quite comfortable entering text and navigating applications using braille-centered commands combined with braille entry.
Speech Input

For those individuals who are visually impaired and have an additional disability that may impede their hand mobility, speech input may be an appropriate solution. Speech input means that a specific computer application such as Dragon Naturally Speaking can be installed on a computer or a cell phone. Users may program the application to recognize their voices. They can then speak commands to the computer or cellular phone or simply dictate information to be written and saved for future retrieval. It is important to note that speech-input users need to follow specific rules to fully realize the potential of this input method.

Description: A person using speech input to dictate a memo.
Selecting the Right Combination

As with any decision regarding technology, it is important to return to the question: "What am I trying to accomplish by using this technology?" The tasks you most commonly perform will determine the types of media that you use as well as the methods of input you decide to use.

For instance, suppose you have a limited amount of vision but are asked to read through large amounts of material. Rather than struggling through countless screens of magnified text and possibly fatiguing your eyes, why not listen to the text being read at an increased speed? Such an approach might be more comfortable for you, and you may be able to retain the material much better by using this alternative medium.

Or say you have to perform a number of tasks pertinent to editing complex and formatted information. In this instance, why not use either magnification or refreshable braille access to physically review the layout of a document or spreadsheet and make the necessary adjustments as needed?
Similar principles apply to methods of input when you are selecting a means of interacting with an application. There's no reason to use dial pad keyboard entry if your cellular phone has a full-sized keyboard. If you are comfortable using braille keyboard commands to navigate throughout an application, why not look for such a solution? Perhaps you prefer to read braille and use a standard keyboard to access text? Some very successful professionals operate in this manner on a daily basis.

As you learn about the various options available to you, take note of your strengths relating to accessing information as well as interacting with it. If you customize a solution that showcases your current abilities, you can become more efficient with these technology tools. Keep in mind that strengths directly correlate to your actual abilities. Some people are better listeners. Other people require either magnified or refreshable braille text to review specific information that might not be as convenient to listen to.

Many individuals are enamored by the thought of speech input. This technology is designed for
individuals who cannot effectively use their hands for a standard or ergonomic keyboard. While speech input may appeal to you as a means of input, remember that it is a much different thought process to dictate information than it is to enter it on a keyboard.

Section Review

Select the best item to answer each of the following questions.

1. Which of the following describes screen magnification?
   a. a preferred mode of input for users with no vision
   b. a preferred medium for users with some functional vision
   c. none of the above

   The correct answer is (b). Screen magnification is a preferred medium for users with some functional vision.

2. A screen reader does which of the following?
   a. provides audio access to computers and cellular phones
b. enables you to control computers and cellular phones with your voice

c. provides speech and screen magnification as dual media

The correct answer is (a). A screen reader provides audio access to information produced by computers and cellular phones.

3. Which of the following describes refreshable braille?
   a. It is driven by the performance of screen magnification.
   b. It relies upon the information provided by a screen reader.
   c. It depends upon braille keyboard entry.

   The correct answer is (b). Screen readers drive the overall performance of a refreshable braille display.

4. Standard keyboard entry can be performed on which of the following?
   a. only on a computer
b. only on a cellular phone  
c. on both a computer and cellular phone  

The correct answer is (c). Keyboard entry is an input mode that can be performed on both a computer and a cellular phone.

5. Screen magnification is measured by which of the following?
   a. the size of the screen  
   b. the memory size on the device  
   c. a factor of "x"

The correct answer is (c). Screen magnification is measured by a factor of "x," which exponentially increases the size of the text displayed on the screen while reducing the amount of information viewed on the screen.

6. Dial pad input allows you the ability to enter which of the following?
   a. letters, numbers, and symbols  
   b. only numbers  
   c. only letters
The correct answer is (a). Dial pad input enables you to enter letters, numbers, and symbols into a cellular phone.

7. Dragon Naturally Speaking is an example of which of the following?
   a. dial pad input
   b. a speech input application
   c. a screen reader

   The correct answer is (b). Dragon Naturally Speaking is an application that can be trained to recognize commands spoken by specific users of the application.

8. If you are expected to access a large amount of information quickly at a high rate of speed, which of the following media would be most effective?
   a. speech output
   b. screen magnification
   c. refreshable braille

   The correct answer is (a). Speech output provides quick, efficient audio access to large amounts of
material without the possibility of eye fatigue for persons with some functional vision.

9. Braille input can be used with which of the following?
   a. Dragon Naturally Speaking
   b. a screen reader or a specifically designed nonvisual application
   c. screen magnification

The correct answer is (b). A braille input device can be used with a screen reader or a specific device with customized applications designed for braille input, output, or both.

10. Which of the following is important when selecting alternative media as a mode of input?
    a. Make an honest assessment of the tasks you are expected to perform.
    b. Take into consideration the speed of your computer.
    c. Insist that speech input be included in your solution.
The correct answer is (a). The types of tasks you are expected to perform, coupled with your visual impairment and your ability to compensate accordingly, will enable you to choose the appropriate media and modes of input that are best suited for you.

In closing, make an honest assessment of your current skill sets and the tasks you will need to accomplish through technology. Select the media and a means of input that will give you the most efficient result. At this time, begin to think of a plan for further developing other skill sets to increase your strategies for accessing and interacting with information. Think about using different combinations of media and input methods, which may vary according to what tasks need to be accomplished.

**Summary**

In this lesson, you learned how to establish criteria for determining what your technological wants and needs might be. You also discovered how thinking about how your needs might evolve over time affects how much technology you can afford. You also established a
framework for determining the types of adaptive media that you may use to access various hardware and software applications. In the next lessons you will learn more about these different types of mainstream and adaptive technology solutions.
Assignment 1

For general information on completing assignments, refer to the Getting Started instructions. Then start this assignment by giving your full name, address, and phone number. Also list the name of this course, Assignment 1, your instructor's name, and the date. Be sure to include the question number along with each answer. This assignment is worth 100 points.

Multiple Choice

Select the best item to answer each of the following questions. (4 points each; 80 points total)

1. Which of the following is NOT an objective of this lesson?
   a. to develop a list of technology to purchase
   b. to develop a criteria for selecting technology
   c. to select preferred media for accessing technology
2. How many questions should be asked when establishing a criteria for selecting the types of technology to access?
   a. 3
   b. 2
   c. 4

3. Needs are BEST characterized as which of the following?
   a. desires to master as many technologies as possible
   b. task-based obstacles that technology can help overcome
   c. items that are not much different than wants

4. Which of the following tasks would BEST be characterized as a need that technology could meet in an employment or educational setting?
   a. filling out a spreadsheet
   b. contacting a friend on Facebook
   c. emailing family photos to a friend
5. Which of the following often describes technology wants?
   a. unrealistic goals
   b. unimportant, and should not be considered when selecting technology
   c. important factors that make the use of technology fun and interesting

6. Which of the following describes expectations as related to technology?
   a. should be determined by how others feel you should use technology
   b. are created when needs and wants are balanced
   c. should never be set when purchasing technology

7. Expectations can do which of the following?
   a. help you discover your need for technology over a fixed period of time
   b. discourage you and should not be set
   c. be made as if you were fully sighted
8. What is the recommended number of years a user should take to pay back a loan to purchase technology?
   a. 7
   b. 5
   c. 9

9. State and federal rehabilitation programs are more likely to assist a person with purchasing technology in which of the following cases?
   a. You cannot afford to purchase it yourself.
   b. You have an extensive list of technology to purchase.
   c. You are deemed employable.

10. Which of the following funding options are available if you cannot purchase your technology and state and federal programs are unable to help you?
    a. local nonprofit organizations such as the Lions Club
    b. local places of worship
    c. both (a) and (b)
11. Which of the following lists contains the alternative forms of media available to technology users who are visually impaired?
   a. typing, dial pad, keyboard
   b. speech input, speech output, braille
   c. magnification, speech output, refreshable braille

12. Which of the following are NOT common accessible types of input available to technology users who are visually impaired?
   a. handwriting and speech output
   b. traditional keyboard and braille keyboard
   c. speech input and dial pad

13. Which of the following describes dial pad input?
   a. the same input as keyboard input
   b. input performed via a phone's dial pad
   c. similar input to Morse code
14. Which of the following applies to screen magnification?
   a. difficult to use for long periods by persons whose eyes easily tire
   b. good for people with any functional vision who need a cellular phone
   c. not to be used in conjunction with speech output

15. Which of the following describes refreshable braille?
   a. input to a computer using a braille keyboard
   b. electronic braille produced on a display connected to a computer or a cellular phone
   c. a braille printer that produces braille on paper

16. Speech input is for which of the following individuals?
   a. anyone who hates to type
   b. those who do not wish to type but can follow the rules of speech input
   c. those who use stereo headsets
17. Which of the following applies to a screen reader?
   a. provides audio and secondary braille access
   b. can only be used on a computer
   c. relies heavily on the use of a mouse

18. Braille keyboard input allows for which of the following?
   a. only data entry into an application
   b. only navigation through the application using braille keyboard commands
   c. the abilities to enter text and navigate throughout an application

19. What is the determining factor that assists you in selecting your preferred technology media and mode of input?
   a. the tasks you perform coupled with the nature of your vision impairment
   b. the cost of the technology
   c. the compatibility of the media with the selected forms of input
20. Which technology would be MOST effective when editing complex formats?
   a. braille and screen magnification
   b. speech output
   c. None are effective for complex formats.

**Essay**

Using the suggestions from the lesson, create a 150- to 200-word essay that discusses the points that follow. Be concise yet detailed in your response. (20 points total)

21. By answering the following items, discuss your technological wants, needs, and thoughts about which media you might prefer for accessing information, as well as your preferred mode for inputting text and interacting with your technology.

a. Discuss at least three needs-driven tasks that technology will help you complete. (6 points)

b. Discuss at least two wants-driven activities that technology will enable you to complete. (4 points)
c. Describe a preferred medium for accessing information, and explain the rationale for your choice. (5 points)

d. Describe a preferred medium of input for interacting with information you receive. (5 points)

Once you have completed this assignment, send it to your instructor. Then begin Lesson 2: Computers and Peripherals.