

Lesson Plan: Technology in the Workplace for pre-HSE Students

CUNY Healthcare Career Kit Unit 1

(TABE 11/12 Focus)

Objectives:

- Students will learn how technology has changed the workplace
- Students will practice previewing text and noticing text features
- Students will practice summarizing using GIST
- Students will answer TABE-like questions about the article for TABE practice

Activity One: Getting Ready to Read

Materials: none

Steps:

1. Tell students that they will be reading an article called “Technology in the Workplace.” Write these questions on the board:
What do you think of when you hear the word “technology”?
What are ways you use technology in your daily life?
What are some good things about technology? What are some bad things?
2. Ask students to talk for 2 minutes with a partner about these questions.
3. Bring the class together, open up the discussion and take notes on their answers to the questions. Also, come up with working definitions for these words: technology, social media, automation, innovation. Ask the students to return to their partners and come up with questions they have about technology in the workplace. After 2 minutes, have each pair of students contribute one question. Write these on the board. (Alternatively, for writing practice, have each pair come to the board and write their own question).
4. Give out the article. Tell students that good readers always preview the text to get an idea of what they will learn. Ask students to look at the title and the subtitles, then lead a short discussion: after looking at the subtitles, what are some things you will probably learn from reading this article? Which, if any of our questions will likely be answered?
5. Begin by reading the first part of the article (up to “The Way We Find Work) out loud. If you have lower level students, you may want to do a think aloud about the first two paragraphs. What are you visualizing as you read? What clues are telling you about time (Technology has *always*...When we talk about technology *today*...)
6. Tell students that good readers have goals when they read—usually it is a question in their minds that they hope the text will answer. Tell students that a good way to keep track of what they are reading is to turn subtitles into questions. Work with

students to turn all the numbered subtitles into questions. Model for the students how you would read the first section “the way we find work,” pause and answer the question “How do we find work?”

Activity Two: Reading and Writing Summaries

Materials: article

Steps

1. Ask students to read the rest of the article silently. You may want to have lower level students read the articles in chunks, stopping after each subtitled section to jot down notes or underline. You can also stop the class at various intervals and review what has been learned so far from the article. This gives students a chance to recall, monitor understanding, and pool their understandings of the text.
2. When students have read, bring them together and ask them to discuss in pairs: Were your questions about technology in the workplace answered? Would the information in this article impact you personally? How?
3. Bring the class together and discuss this briefly.
4. Introduce summarization. Tell students that they will now write summaries of the article in sections. The reason for this is that 1) it will give them a chance to review what they read and 2) it will help them remember what they read. Point out that no one can remember everything they read. Instead they remember the main idea or the important information. Writing summaries is excellent practice for getting better at identifying what is important in a text and what they need to remember.
5. Remind students that one of the most often-asked questions on the TABE is “what is the main idea? Or “what is the best summary?” This is a hard skill to learn! What are some ways to begin understanding the concept? One way is to think about *general categories* and *specific examples*. A good analogy comes from the supermarket. If you wanted to buy lettuce, tomatoes and onions, what aisle of the supermarket would you look in? Produce, of course. Produce is the *general category*. Lettuce, tomatoes and onions are the *specific examples*. *You can have students practice this by writing the following questions on the board:*

In the sets below, which represents a *general category*, and which are *specific examples*?

- A. Milk
- B. Coffee
- C. Juice
- D. Beverages

Provide students with additional practice by writing the following on the board and asking the same question:

- A. U.S. Cities
 - B. Chicago
 - C. Los Angeles
 - D. Washington DC
6. Now ask students to look at Section 1, “The Way We Find Work.” Do they see a general statement? Do they see specific examples? (You may want to say that terms like “like” and “such as” often are clues that there is an example.) Using this method, try to get students to see that the main idea is in the first two sentences.
 7. Ask students to reread this section, then write the sentences below on the board (or give as a handout). Ask students to tell you which is the best example of the general, main idea and why.:
 - Both employers and employees used to use newspapers to find jobs, but now they use websites and social media.
 - People use social media sites like Facebook to make themselves known, connect to others, and find opportunities.Through discussion, establish that a summary should include *all* the general information in as short a sentence as possible, not focus on too many details, and be in their own words.
 8. Now ask students to repeat the process for the next section: The Type of Jobs We Do. Identify the general, main idea sentences and the detailed examples. This time, ask students to work in pairs to write a one-sentence summary for the section, aiming to keep their sentence 20 words or less. Have a few pairs write their summary sentence on the board. As a class, look at the sentences. Which one captures the main idea/important information best? You may want to revise one of the student sentences on the board with help from students to make it “best.”
 9. Divide the class so that each pair of students has one of the remaining sections for which to write a summarizing sentences of 20 words or less: “The Education and Skills We Need,” and the five bulleted sections of “The Way We do Work.” If you have many students in the class, have more than one pair work on a section and put both of the summarizing sentences they write on the board on the board. Then, have each pair of students present their summarizing sentence, ask the rest of the students in the class to reread the section that summary sentence is about, and say whether they think the summary sentence captures the important information, or needs to be revised.

Activity Three: TABE Practice with the Text

Materials: TABE-like questions

Steps:

1. Tell students that TABE questions focus heavily on the main idea. They also focus on text structure. They have just been working on finding the main idea or

important information with GIST. *Signal words* and *text structure* can help them in this process.

2. Introduce the idea of signal words. Signal words are like road signs that tell you what is coming up ahead. For instance, if they see the word “*Because*,” what do they think is coming? Will it be a *reason* to do something, or a *cause* that had a *result*?
3. Ask students to look at Section Two: The type of jobs we do. Where does the general or main idea seem to be? Where are the details? Point out that the details are often preceded by a signal term: *For example*. *For example* is a clue that details are coming.
4. Tell students that if they understand text structure, this will also help them tackle TABE questions. It will also help them in their own writing. When we tell them that they have to “organize their ideas” in their writing, this is the same thing that authors think about when they structure their texts. Some common ways that texts are organized is in time order (what happened first, second etc. and cause and effect. Texts may also compare two things.
5. Ask students to reread Section 1: *The Way We Find Work*. What would be the best way to describe the text structure. Is it about then vs. now, or is it about cause and effect? When students answer, you can point out the phrases *In the 19th and 20th centuries* and *Today*. Doesn’t this imply a then vs. now structure?
6. Repeat the process with Section Two: The Types of Jobs We Do.
7. Give out the sample TABE questions and have students work on them, then review.

Optional Activity Four: Word Families

Materials: text

Steps:

1. Tell students that another important reading skill they should practice is understanding words without the use of a dictionary. Sometimes you can figure out a word by the words around it—this is called context, and it works about 15% of the time. Another way is by recognizing word families. These are words that are closely related and mean something very similar, but come in different forms. For instance, an important word in the reading was *automation*. What does it mean? Ask whether any students in the class know what the word means, and have them explain it.
2. Circle the word part “auto,” and ask students whether they can think of other words that start with “auto.” They might come up with “automobile.” If students don’t think of it, you may want to add “autobiography” and “autograph.” Explain that the word “auto” means “self.” An “automobile” moves by itself. Explain that some word parts have a common root and this can be used to figure out the meanings of related words. Another good example is “bio.” We have biology, biography, bionic.
3. In addition to words that have the same root but mean slightly different things, we have words that mean the same thing and look almost the same but have different

endings. Go back to the word “automate.” Can they think of any words that are almost the same with a different ending? If students don’t come up with them, write: *automatic*, *automate*, *automatically*, and *automation*. Explain how each word is slightly different because it is a different part of speech, and therefore must be used differently in a sentence. Also explain that we can do something *automatically*, or have an *automatic* reaction to someone, as if we don’t even think about it, it just happens.

4. Write these cloze sentences on the board:
The door opened _____ when I touched the doorbell.
They want to _____ the factory so that they can cut a lot of workers.
Her reaction was _____ when she saw that the store was closed; she cursed out loud.
5. Have students copy the sentences, fill in the blanks, compare notes with a partner, then come up to the board and fill in the blanks. Review as a class.
6. Write the following sentence starter on the board: One thing that causes me to take an automatic dislike to someone is.....
7. Model how you would answer the question yourself, for instance: *One thing that causes me to take an automatic dislike to someone is.....they are mean to waiters*. Ask students to take turns with a partner filling in the sentence with their own dislike. Choose students to say their sentences aloud, or to say their partner’s sentences aloud.
8. Introduce the next word: *produce*. Ask students to say what it means, and whether they can think of any words that are related. They might come up with *product*. You can also write *productive*, and *productively*. Try writing them in columns of Verb-Adjective-Adverb-Noun so students can see the patterns in the endings. Point out the patterns, such as “tion” and “ly.” With the whole class you may want to have students decide which words fits in the cloze sentence: She was very _____ at the office.
9. Repeat the process with *innovate*. (To come up with new methods, ideas, or inventions). Give some examples of *innovate*. Again, write the related words across the board under “Verb-Adjective-Adverb-Noun so students can see the pattern, and point out the pattern in the endings. Again, you may want to have the class fill in the blank for a cloze sentence, such as “One of the most important _____ made by Amazon was home delivery.
10. Give out the homework.
11. For homework, students should take home the full handout and study it in preparation for a quiz next class.

LESSON PLAN MATERIALS

Materials for Activity Two

Technology in the Workplace

Technology has affected the world of work. Even in ancient times, tools like hammers, nails, and wheels made work easier. In the 18th century (about 300 years ago), a big change took place in the world of work. Machines began to be invented that could make things very quickly. This changed people's lives a lot. One change is that more people began to work in factories, instead of on farms where they grew their own food.

When we talk about technology today, we usually mean computers. Hardware is the actual physical machine. Software is the programming that makes the computer work. *Technology* also refers to collecting information (data) and using it for many different purposes. Technology has had a big effect on today's labor market. It affects the way we find work, the types of jobs we do, the education and skills we need, the way we do work, and the way companies operate.

1. The way we find work

In the 19th and 20th centuries, people often looked for jobs in local newspapers. Today they use technology. Job search websites such as Monster, Indeed.com and Glass Door have become popular. People use social media sites like LinkedIn and Facebook to make themselves known, connect to others and find opportunities. Employers use these sites too, to find employees.

2. The type of jobs we do

As technology has become more widespread, some jobs have disappeared. Others have appeared. For example, companies like Netflix can offer movies on the internet. For this reason, there are fewer video rental stores. Another example is travel. When people took vacations, they used to see a travel agent to book their trip. A ticket collector would take their tickets. There are fewer of those jobs now that we use websites to book our tickets, and electronic machines to get our tickets and to check our bags. New technology also creates new jobs. Some jobs that have been created through technology include people who specialize in using social media like Facebook. Another job created by technology is health information manager. This is a person who keeps track of people's health by looking at information on a computer.

3. The education and skills we need

A lot of work relies on technology. We use it to do simple tasks like answering phone calls. But for some types of work, employers need people. Some work requires innovative thinking—in other words, thinking in a new way. Another thing employers need is workers who are creative and flexible, and have good “people” skills. An example is an employee who can figure out how to arrange products in a store so that customers can find them easily. You need a person to provide hands-on care for sick patients. You need machines for cashiers to ring up purchases, and you need machines to store the medical information of patients. Technology is important in the labor market, so people who want to get, keep and be promoted in a good job need technical skills. This means learning how to use technology. It also means learning the skills that can only be done by people.

4. The way we do work

Technology has also changed the way we work, by:

- **Making workers more productive**
 - Using technology can help you do your job better. You can finish more tasks, do them faster and sometimes more accurately. For example, with programs like Word, you can create and edit a letter more quickly than if you were to do it by hand or on a typewriter.
- **Reducing the tasks workers do themselves**
 - Some tasks that workers used to do themselves are now done by technology. For example, lawyers can use computer programs to search through thousands of documents to find certain information. This allows them to spend more time doing work computers can’t do. Lawyers need to think hard to come up with good arguments to win their cases in a courtroom.
- **Replacing some workers**
 - More and more, we rely on machines to do work without any help from humans. This is called automation. Many people wonder if machines or even robots will one day replace workers. Right now, machines can put together car parts, answer customer calls and check passengers in at airports. Robots can work together in warehouses to put together

products to be shipped out to customers. Experts disagree on what kind of impact automation will have on work in the future.

- **Making some workers more mobile**

- Mobile phones, computers and the internet have allowed employees to do work from almost anywhere at almost any time. For example, some office workers can work from home for a local company or for a company based in another country. And, they can check email after the official end of the workday. Because of videoconferencing, we can even have meetings with people who are in different places around the world.

- **Directly connecting people who need goods or services to people who can offer it**

- Businesses like Uber, Airbnb and Ebay allow sellers to connect with customers in a very short time span. Through the internet, they offer transportation, places to stay, and products to people who want to buy them.

Materials for Activity Three

TABE Questions for “Technology in the Workplace”

- 1. Reread the section entitled “Replacing Some Workers.” Which of the following is a main idea?**
 - A. Machines can put together car parts.
 - B. We often rely on machines to do work that people used to do.
 - C. Robots can work together to fill warehouse orders.
 - D. Computers can check people in at the airport.

- 2. Reread the section entitled “The Education and Skills We Need.” Which of the following is the main idea?**
 - A. Arranging products in a store is a creative task best done by a person.
 - B. People are needed to give hands-on care to the sick.
 - C. Some jobs are best done by people.
 - D. Lawyers need to think of good arguments to win cases in the courtroom.

- 3. Look at the section called “The Types of Jobs We Do.” Which two details support the idea that technology has made some jobs disappear while new jobs have been created?**
 - A. There are fewer travel agents now that we can use websites to book our tickets.
 - B. .Advances in technology have created new jobs like app developers and social media specialists.
 - C. People now use websites like Monster and Indeed.com to look for jobs
 - D. Some office workers can work at home because of technology.

- 4. What is the best definition of the word “reliant” as it is used in this sentence:**

For example, jobs that involve activities such as data entry, assembly line work or routine design work have all become reliant on technology?

- A. Independent of
- B. Dependent on
- C. The same as
- D. Different from

VOCABULARY HOMEWORK: WORD FAMILIES

Use the word family chart below to help you write answers to these questions below. WRITE YOUR ANSWERS IN COMPLETE SENTENCES. The first one is done for you as a model.

1. One of the things that reduces *productivity* at work is _____.
2. One *product* that I really like to use at home is _____ because _____.
3. One *innovative* thing I did to improve my life is _____.
4. I think _____ is one of the greatest *innovations* of all time because _____.

WORD FAMILY: Automate-Automatic-Automation		MEANING: To change to a system in which machines are used to do something rather than people. Can also sometimes mean doing something without thinking, like a machine.	
Verb	Adjective	Adverb	Noun
Automate: To change to a system in which goods are produced or jobs are done by machines instead of people. (They want to fully <i>automate</i> a restaurant on 42 nd St.)	Automatic: An automatic machine (That is an <i>automatic</i> weapon). A second meaning is something that is done without thinking (My <i>automatic</i> response was "no.").	Automatically: something that is done with the aid of a machine. (The door opens <i>automatically</i> , so you don't have to pull that hard.) A second meaning: without thinking about what you are doing	Automation: the use of machines instead of people to do a job. (<i>Automation</i> is the wave of the future.)
WORD FAMILY: Produce-Product-Production		MEANING: To make or grow	

Verb	Adjective	Adverb	Noun
<p>Produce: To grow or make something, whether it's to be sold (<i>They produce 20 machines a month</i>) or made with skill (<i>The artist has produced some beautiful work</i>). Also to make something happen (<i>The drug produces seizures in some people</i>).</p>	<p>Productive: producing or achieving a lot (<i>I tend to be more productive in the morning</i>)</p>	<p>Productively: Working in a productive manner (<i>He worked productively throughout the day</i>).</p>	<p>Production: the process of making or growing things to be sold as products (<i>Steel production has increased</i>) Product: Something that is made in a factory, grown, or taken from nature (<i>None of our products are tested on animals</i>) Productivity: the rate at which goods are produced and the amount produced (<i>Better equipment leads to higher productivity</i>)</p>
<p>WORD FAMILY: Innovate, Innovation</p>		<p>MEANING: To think of and begin to use new ideas, often different and better than before; a new idea or invention</p>	
Verb	Adjective	Adverb	Noun
<p>Innovate: to think of and use new ideas (<i>Their ability to innovate has allowed them to compete in world markets</i>.)</p>	<p>Innovative: using or inventing good new ideas and methods (<i>Amazon took the innovative approach of delivering goods to people's homes</i>.)</p>	<p>Innovatively: To do something in an innovative way (<i>He innovatively added a new kind of packaging</i>.)</p>	<p>Innovation: a new idea, method, or invention (<i>Anti-lock brakes were a major safety innovation</i>). Can also mean the introduction of new ideas: (<i>Innovation is one of the cornerstones of this company</i>.)</p>

