NEWS BREAK

Article: **Amazon workers may listen to what you tell Alexa: THEY HEAR YOU**

Section: **BUSINESS, D1**

Sunday's News Break selects an article from **Sunday, April 14, 2019,** of The Seattle Times print replica for an in-depth reading of the news. Read the selected article and answer the attached study questions.

You are encouraged to modify this lesson to fit the needs of your students. For example, some classrooms may be able to use this as a worksheet and others might need to ask and answer the questions in a small group or larger, class discussion.

Please be sure to preview all NIE content before using it in your classroom to ensure it is appropriate for all of your students.

Standards:

CCSS.ELA-Literacy.RI.4.1

- Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

CCSS.ELA-Literacy.RI.4.2

- Determine the main idea of a text and explain how it is supported by key details; summarize the text.

Objectives:

Students will discuss whether they were surprised to learn that humans are listening to their conversations on their voice-activated systems at home or on their cell phones. They'll discuss whether they think most consumers know this is happening, and whether they consider this an invasion of privacy. Should this be illegal?

Pre-Reading Discussion:

- What do you think the article will be about? Are there clues in the pictures?
- What can you infer from these 2 pictures?

Vocabulary Building:

Read this sentence, what do you think the highlighted words mean using *context clues*? A **context clue** is a word or words that are hints and refers to the sources of information outside of words that readers may use to predict the identities and meanings of unknown words.

"The software learns as it goes by seeing patterns amid vast amounts of data. The algorithms powering the Echo and other smart speakers use models of **probability** to make educated guesses."

Write your guess and then look up the definition and write it below your guess. How close did you come to the correct definition?

Probability **Guess:**

Probability Definition:

Comprehension Questions:

1. Tens of millions of people use smart speakers and their voice software to play games, find music or trawl for trivia. Millions more are reluctant to invite the devices and their powerful microphones into their homes out of concern that someone might be listening? Are their fears valid?
2. Amazon.com employs thousands of people around the world to help improve the Alexa digital assistant powering its line of Echo speakers. What does the team do?
3. The Alexa voice-review process, described by seven people who have worked on the program, highlights the often-overlooked human role in training software algorithms. In marketing materials Amazon says Alexa "lives in the cloud and is always getting smarter." But like many software tools built to learn from experience, _____ are doing some of the teaching.
4. The team comprises a mix of contractors and full-time Amazon employees who work in outposts from Boston to Costa Rica, India and Romania, according to the people, who signed nondisclosure agreements. What does that require them to do?
5. The team works nine hours a day, with each reviewer parsing as many as _____ audio clips per shift.
6. Sometimes they hear recordings they find upsetting, or possibly what?
7. Amazon, in its marketing and privacy policy materials, doesn't explicitly say humans are _____ to recordings of some conversations picked up by Alexa. "We use your requests to Alexa to train our speech recognition and natural-language understanding systems," the company says in a list of frequently asked questions.
8. The Intercept reported earlier this year that employees of Amazon-owned _____ manually identify vehicles and people in videos captured by the company's doorbell cameras, an effort to better train the software to do that work itself.
9. Globally, consumers bought _____ million smart speakers last year. Millions more use voice software to interact with digital assistants on their smartphones.
10. Most modern speech-recognition systems rely on neural networks patterned on what?

Discussion Questions (small/large groups), Journal Prompts or Essay Questions:

- What surprised you the most about this article? Did you already know that humans were listening to Alexa, RING, Echo and other voice activated systems in your home?
- Do you think that most consumers know this is happening? Why or why not?
- Would you consider this an invasion of privacy? Why or why not?
- Should this be illegal? Why or why not?

Two of the workers said they picked up what they believe was an assault. When something like that happens, they may share the experience in the internal chat room as a way of relieving stress.

Amazon says it has procedures in place for workers to follow when they hear something distressing, but two Romania-based employees said that, after requesting guidance for such cases, they were told it wasn't Amazon's job to interfere.

- How difficult would it be for you to listen in on an abusive or illegal/criminal activity and not be able to do anything about it?
- Is it Amazon's job to interfere? Why or why not?

In Alexa's privacy settings, the company gives users the option of disabling the use of their voice recordings for the development of new features. A screenshot reviewed by Bloomberg shows that the recordings sent to the Alexa auditors don't provide a user's full name and address but are associated with an account number, as well as the user's first name and the device's serial number.

- Do you think most consumers know about the "disabling" feature? Why or why not?

"You don't necessarily think of another human listening to what you're telling your smart speaker in the intimacy of your home," said Florian Schaub, a professor at the University of Michigan who has researched privacy issues related to smart speakers. "I think we've been conditioned to the [assumption] that these machines are just doing magic machine learning. But the fact is there is still manual processing involved."

- Do you agree or disagree with Schaub's statement? Why or why not?

Newsbreak Answer Key: April 14, 2019

Pre-Reading Discussion:

Answers will vary

Vocabulary Building:

Probability: The extent to which an event is likely to occur, measured by the ratio of the favorable cases to the whole number of cases possible.
"The area under the curve represents probability."

Comprehension Answers:

1. Sometimes, someone is.
2. The team listens to voice recordings captured in Echo owners' homes and offices. The recordings are transcribed, annotated and then fed back into the software as part of an effort to eliminate gaps in Alexa's understanding of human speech and help it better respond to commands.
3. Humans
4. It bars them from speaking publicly about the program.
5. 1,000
6. Criminal
7. Listening
8. Ring
9. 78 million
10. The human brain

Discussion Questions (small/large groups), Journal Prompts or Essay Questions: Answers will vary