

BCMS Article of the Week #4 (Appropriate)

2019-20

Toyota plans for a future full of "partner robots"

Student _____

Class _____

Due Date: _____

Instructions: COMPLETE ALL QUESTIONS AND MARGIN NOTES using the reading strategies practiced in class. This requires reading of the article three times.

Step 1: Read (skim) the article using these symbols as you read:

(+) agree, (-) disagree, (*) important, (!) surprising, (?) wondering

Step 2: Read the article **carefully** and **make notes in the margin**. Notes:

- Comments that show that you **understand** the article (A summary or statement of the main idea of important sections; inferences made)
- Connections you make (text-to-self, text-to-text, text-to-world)
- **Questions** you have - show what you are **wondering** about as you read.
- As needed - notes that differentiate between **fact vs opinion, cause vs effect**.
- Observations about the **writer's craft** (organization, word choice, perspective, support/evidence) and choices affect the article.

Step 3: A final quick read noting anything you may have missed during the first two reads.

Step 4: Answer questions on looseleaf. Remember to use complete sentences and to always include details (the evidence) to support your answer.

Remember you are evaluated on all your work, annotations, margin notes, and question answers.

NEWSELA

Toyota plans for a future full of "partner robots"

By Associated Press, adapted by Newsela staff on 12.16.15 Word Count 568



Akifumi Tamaoki, general manager of Toyota Motor Corp.'s partner robot division, demonstrates Toyota partner robot HSR, or Human Support Robot, at the International Robot exhibition in Tokyo, Japan, Dec. 2, 2015. HSR can pick up after people, bring an item to the bedside, or open curtains. AP Photo/Shizuo Kambayashi

Margin Notes

(my thoughts, reactions and questions; Facts vs Opinions; Causes/Effects; Summary; Writer's Craft)

TOKYO, Japan — Toyota Motor Corp. has plans to become a key player in the growing market for robots that can help the elderly and other people.

The company believes it can use its manufacturing experience to become as important in the new field it calls "partner robots" as it is to making cars. Toyota currently employs only 150 robotics engineers out of a worldwide staff of 300,000. But it is putting money into robotics research and development.

Toyota last month announced a \$1 billion investment in a company to develop artificial intelligence and robotics. The Japanese car maker is already working with Stanford University and the Massachusetts Institute of Technology (MIT) on robotics.

Akifumi Tamaoki is the general manager of Toyota's partner robot division. "We are preparing for a future in which people may not be able to drive cars," or may need artificial intelligence to help them drive, he said. "And once they get off their cars, they may need help from partner robots."

Japan's Government Counts On Robotics

In the future, Japanese people could well use the help. Japan's population is aging more quickly than in any other industrial nation, and the government is counting on the robotics industry to grow. Other companies have jumped in, including Internet company Softbank Corp. It sells a humanoid robot that carries on simple conversations.

Tamaoki said Toyota's interest in robotics goes back decades, and the company uses them in manufacturing at its car factories. But it now sees the technology as a potentially successful business on its own.

Some of that comes from the auto and tech industries, which are using artificial intelligence to develop cars that can drive by themselves. Google Inc. is testing driverless vehicles. Also, Toyota's Japanese rival Nissan Motor Co. is especially confident about the technology and has plans to start selling such vehicles by 2020.

Honda's Robot Not Very Useful

Honda Motor Co. was a leader in robots with its Asimo walking and talking child-shaped robot. But critics say that Honda focused too much on duplicating human movements and behavior, and lost sight of trying to be useful.

After the March 2011 nuclear disaster in Japan, the Asimo could do nothing to help people. Honda was publicly criticized over this and took the criticism seriously.

Toyota demonstrated a one-armed partner robot on wheels earlier this year. Called the HSR, or Human Support Robot, it looks a bit like R2-D2, the robot from "Star Wars." The HSR is loaded with sensors and

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<p>cameras. It can pick up after people, bring an item to a bed or open curtains.</p> <p>Universities Help With Research</p> <p>The robot is not yet for sale to the public. Toyota is working with 10 universities in Japan to figure out how the robot can be useful to people, Tamaoki said. The company plans to start working with overseas educational organizations next year.</p> <p>Tamaoki believes robots like HSR will gradually become widespread. That possibility may take another decade, though.</p> <p>Toyota is planning on adding another arm to HSR, which will allow it to perform more complicated tasks. The car company also will give it the ability to have a conversation. The robot now comes with a flat panel that works like a videophone or video player but can't talk.</p> <p>One research group has proposed using it for taking care of pets. It could jiggle a toy for a lonely cat, according to Toyota.</p> <p><i>Article from Newsela</i></p>	<p>Margin Notes (my thoughts, reactions and questions; Facts vs Opinions; Causes/Effects; Summary; Writer's Craft)</p>
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<p>Comprehension Questions</p> <p>Answer the following questions on looseleaf. Use complete sentences. Always include relevant supporting information from the text to support what you are saying.</p> <ol style="list-style-type: none"> 1. Give one reason why Toyota is especially focused on developing robots for the elderly? 2. Describe HSR, or the Human Support Robot, and how it will be useful to the elderly. 3. Read the first sentence of the article. <i>Toyota Motor Corp. has plans to become a key player in the growing market for robots that can help the elderly and other people.</i> What does the phrase "key player" mean? 4. This article was written in 2015, what role do robotics or AI (Artificial Intelligence) play in your life today? Explain.
