

Robots help get food from farm to table

Level: Advanced (C1–C2)

Time: Approximately 90 minutes

Business topics: automation of job tasks, introduction of AI and robots, problem-solving, technology-led change

Business language focus: language associated with new artificial intelligence, technology, unskilled labour, and the food supply chain

Activities: In this lesson, students will:

- read a business article and look at the language necessary to understand and talk about it
- learn or revise and define business collocations and expressions
- discuss the relevance of the article contents to their own company or line of work
- discuss aspects of the article in greater depth
- summarize benefits and facts and produce clear and concise presentation slides

Materials: One copy of the worksheet per student

Group size: This lesson can be used with pairs or groups, with some whole class discussion. It can also be used for one-to-one teaching and online teaching.

Overview: This lesson is based on an authentic article from a trusted new source. The article talks about how the coronavirus crisis and lockdowns have sped up the development and workplace integration of certain types of robots and artificial intelligence (AI). It focuses on five robots that have already been deployed in various stages of the food supply chain in the US and talks about the benefits and advances they can bring not only for the companies but also for employees.

1. Warmer

Students look at the images and discuss what tasks they think each robot does. They speculate about the role each robot plays in the food supply chain. They should give reasons for their answers.

Note: The images of the robots are the same as the ones mentioned in the article and are shown in the same order.

2. Key words

Students search for words in the text and write them next to the definitions while noticing how the words are used in context

Key:

1. *buckle*
2. *wrestling*
3. *harvest*
4. *marginal*
5. *aisles*
6. *yield*
7. *courier*
8. *kinks*
9. *grocers*
10. *catch-22*
11. *chunk*
12. *inventory*

3. Understanding the article

After reading the article, but without referring back to it, students should read the statements and decide whether they are true or false. Then they can check their decisions by looking back over the article, and correct any that are false. At this level, they should be coming up with their own wording and not simply copying what is written in the article.

If students are working in pairs or small groups, they can collaborate on the answers to promote peer teaching before you check answers as a class.

Key:

1. *False. Before the pandemic, businesses were starting to see a trend towards greater deployment of AI, but this trend had been moving slowly.*
2. *True.*
3. *True.*

4. *False. The increase in online shopping due to the pandemic and restrictions has meant smaller shops need to find a way to avoid losing all their business to large multinational online retailers.*
5. *False. Artificial intelligence can free up essential workers and allow them to carry out more sophisticated tasks and also lessen the chances of them becoming mentally tired and physically strained.*
6. *False. Many of the robots from the article could be deployed in sets of groups rather than individually in likely future scenarios.*
7. *True.*

4. Business language – word pairs

- a. Ask students to complete the phrase starting in Column A by using words from the word pool above the table and adding them to Column B. Point out that although other word pairs may be possible, they are looking for ones that they already read in the article. Then they should scan the article to check their answers, before, in Column C, coming up with example sentences – where possible from their own life - for each. This task can be done in pairs or small groups to encourage speaking and collaboration.

To extend this task, students can create written definitions and swap them with another pair of students. The other pair should match the first pair's definitions with the word pairs. This will encourage the students to write concisely and clearly so that others understand – a very useful business skill!

Key: (plus suggested or possible definitions)

1. *supply chain: a series of processes involved in supplying a product to someone*
2. *industrial revolution: the period in Europe and the US when machines began to be used for producing goods and many new industries developed (the first industrial revolution was in the 18th and 19th centuries)*
3. *pick and pack: choose a product and prepare to send it to a customer*
4. *labour shortages: when there aren't enough people available to do the work that needs to be done*
5. *economies of scale: reductions in the cost of making and selling products that are made possible because a business is very large*
6. *a surge in demand: when there is a sudden increase in the need for certain things*

7. *support and deploy: give someone help they need in setting up a reliable machine and using it in their business*
8. *micro-fulfilment: the process of packing orders in a small warehouse close to the customers who order the products*

5. Business & general English – other useful phrases

- a. Have students find four words and phrases in the article to complete the sentences. The number of words, the section number and definition are given.
- b. Students use each phrase in sentences of their own. Remind them that the more personal and meaningful the sentences are to them, the more likely they are to remember the phrases and be able to use them correctly in the future.

Key:

- | | |
|--------------------------|-----------------------------|
| 1. <i>underway</i> | 3. <i>up and running</i> |
| 2. <i>spick and span</i> | 4. <i>in the process of</i> |

6. Using the key words

- a. Students complete the questions with some of the key words from task 2.
- b. They should ask and answer the questions in groups or pairs.

Key:

- | | |
|--------------------|---------------------|
| 1. <i>grocers</i> | 4. <i>harvested</i> |
| 2. <i>chunk</i> | 5. <i>wrestling</i> |
| 3. <i>catch-22</i> | 6. <i>inventory</i> |

7. Discussion questions

In small groups, students discuss the questions which expand on topics from the article. Hold a short whole-class feedback session and compare and contrast each group's answers and input. If you are teaching an online class or a one-to-one lesson, give the learner(s) plenty of time to consider their responses to each of the discussion questions.

To extend the task, have students talk about which machines they already have to help them with monotonous tasks at home, and which others (already developed or not) they would like or hope to have in the future.

8. Wider business theme – creating a clear proposal and presentation

- a. Referring back to the conversations they had in the previous task, have pairs or small groups imagine a robot that could be deployed in either their workplace or business or in another one that they know well. They should make notes about the benefits this robot could bring to the company in the areas of employee well-being, (long-term) financial savings, and ease of production or process.
- b. Ask students to turn their notes into a clear, precise, and convincing PowerPoint presentation that their boss can present to the board at next week's meeting.