BUSINESS LESSON

HOW SMART IS TODAY'S ARTIFICIAL INTELLIGENCE?

TEACHER'S NOTES

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How Smart Is Today's Artificial Intelligence?

https://www.esldebates.com/business-how-smart-is-todays-artificial-intelligence/

Vocab matching answers

1. e
2. h
3. i
4. b
5. a
6. f
7. d
8. g
9. j
10. c

Video Answers.

1. It is one of the companies that is automating video news production.

2. He is Wibbitz's CEO.

3. Their product was built with machine-learning algorithms, and it became more accurate over time.

4. The result is a video made in a few seconds that is not drastically different from what a human would make in a few hours, given the same constraints.

5. Wibbitz is part of a rapidly growing industry of so-called "AI-powered" products.

6. When people talk about AI, they make reference to machine learning.

7. It is a subfield of computer science that dates back to, at least, the 1950s.

8. She is the Head of the Machine Learning Department Carnegie Mellon.

9. Domingos offers a nice simple way of understanding supervised machine learning. He says: "Every algorithm has an input and output: the data goes into the computer, the algorithm does what it will with it, and out comes the result. Machine learning turns this around: in goes the data and the desired results and outcomes the algorithm that turns one into the other."

10. He is a Labour Economist at MIT.

Warmer questions

- How would you define "smartness"?

- Is there such a thing as multiple types of intelligence?

- When was the last time you interacted with a machine?

- If machines can think like a human are their inventions their own or do they belong to their creator?

Reading section

Will the real genius please stand up

Artificial intelligence (AI) is the intelligence of machines. As a general rule, anything can be considered artificial intelligence if it implicates a program doing something that we would typically think would depend on the intelligence of a human being. With technology becoming an essential part of our everyday lives, AI has become a topic of debates and discussions where advocates consider it as a blessing and for opponents, it is a calamity. Yet, like any technology, there is no inherent good or evil in AI, it will simply depend on how humans implement and use it.

The different levels of artificial intelligence and there are different categories within the domain of artificial intelligence. They include:

Strong vs. Weak

Strong artificial intelligence refers to the work that looks to genuinely imitate a human. The weak artificial intelligence simply aims to build systems that are able to behave in the same manner as humans do, but do not aim at thinking as humans think. According to SAS, there are current uses of strong AI and that their edge against people is noticeable. Within the banking and finance sectors, algorithms are designed to incorporate high level intelligence to analyse payments and transactions.
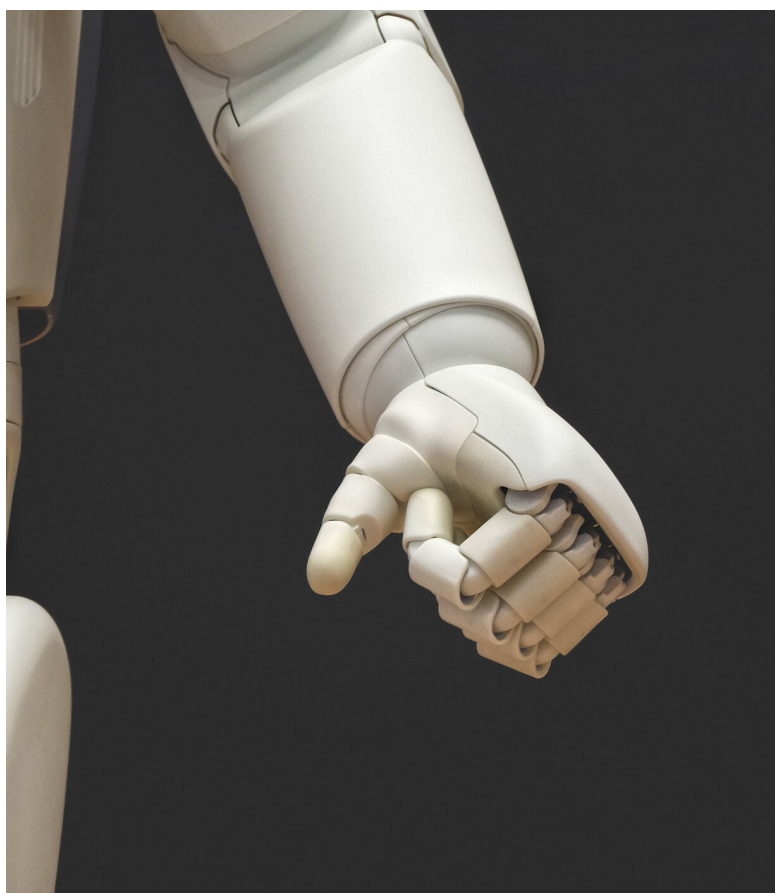
By doing so, these programs are able to spot irregular bank activity. For instance, if a client usually shops in a particular set of shops but then there is a transaction from an unfamiliar place, then the system can 'think' and thus reason that the transaction is not normal.Retail businesses also use similar systems to offer 'chat' functions to their customers when they visit their websites. This allows customers to have their questions answered without the need of a customer service assistant. The software is able to read sentences and understand complex grammar so it can 'comprehend' questions.

Narrow vs. General

Narrow artificial intelligence is meant to meet certain tasks and the general artificial intelligence are those machines designed to reason. Examples include self-driving cars, computer vision procession for medical diagnosis, and weather forecasting. In essence, narrow AI works in a limited context and is unable to handle unexpected experiences. While this does not sound impressive, in fact, it is this type of AI which will have the greatest effect on displacing workers as it is exceptional in performing routine jobs.

Apple's virtual assistant, Siri, or Google's voice search feature is also prime examples of some AI applications that are making our lives easier every day.

Questions to consider:

- Researchers also aim at introducing an emotional aspect into AI machines. How will this affect our lives?

- We are still unsure about the future of artificial intelligence. Is artificial intelligence a threat or a blessing?

- There are plenty of wild statements about artificial intelligence –from a threat to our jobs to a threat to the human race as we know it. Are these mere overstatements, or are these fears based on facts?
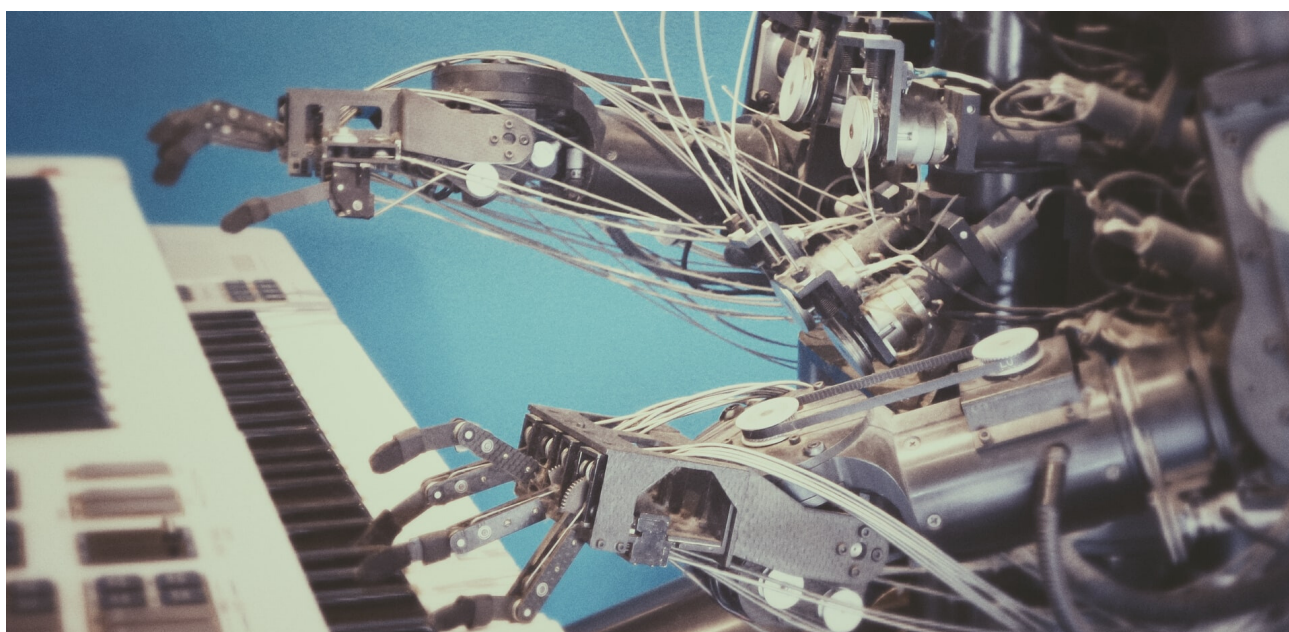
Vocabulary matching

Using the words on the left match them to their real definitions.

Vocab Meaning	Meaning

1. RSS

a. give a brief statement of the main points of (something).

2. A feed (or stream)

b. a process or set of rules to be followed in calculations or other problem-solving operations, especially by a computer.

3. Robot

c. the quantities, characters, or symbols on which operations are performed by a computer.

4. Algorithm

d. a subdivision of a field (as of study).

5. Summarise

e. Really Simple Syndication, a standardised system for the distribution of content from an online publisher to Internet users.

6. Accurate

f. (of information, measurements, statistics, etc.) correct in all details; exact.

7. Subfield

g. a method of data analysis that automates analytical model building. It is a branch of artificial intelligence based on the idea that systems can learn from data, identify patterns and make decisions with minimal human intervention.

8. Longshoremen

h. supply (a machine) with the material, power, or other things necessary for its operation.

9. Wage

i. a machine capable of carrying out a complex series of actions automatically, especially one programmable by a computer.

10. Research

j. phrasal verb; to have existed for a particular length of time or since a particular time. Starting from a particular time.

Video: The big debate about the future of work

Vox has made a short video which describes how smart AI in our work today is and what their applications are in business and life.

https://www.esldebates.com/business-how-smart-is-todays-artificial-intelligence/

Watch the video and then answer the questions below

1. What is Wibbitz?

2. Who is Zohar Dayan?

3. How was Wibbitz's product built?

4. What is the result of Wibbitz's process?

5. What is Wibbitz part of?

6. What do people make reference to when talking about AI?

7. What is machine learning?

8. Who is Manuela Veloso?

9. What does Pedro Domingos say in his book The Master Algorithm?

10. Who is David Autor?

The advantages of using AI

- Less Room for Errors. With artificial intelligence, as decisions are based on previous records of data and a set of algorithms, the chances of errors are almost null and greater precision and accuracy is achieved. Solving complex problems that require difficult calculation can also be done without any scope of error.

- Right Decision Making. Emotions that often get in the way of rational thinking of a human being are not a limitation for artificial thinkers. Missing the emotional side, robots can think logically and take the right decisions in a short span of time.

- Implementing AI in Risky Situations. Machines that are designed with predefined algorithms can be used in situations where human safety is vulnerable. Intelligent machines can replace human beings in many laborious and painstaking areas of work.

- Can Work Continuously. Unlike humans, machines do not get tired, even if they have to work for consecutive hours. Their efficiency is not affected by any external factor. Artificial intelligence can be efficiently utilised in carrying out repetitive and time-consuming tasks.

The disadvantage of using AI

- Expensive to Implement. AI is expensive when combining the cost of installation, maintenance and repair. Businesses with limited funds will find it hard to implement AI technology into their processes.

- Dependency on Machines. Over-reliance on machines escalates progressively. As our dependency on machines intensifies, it becomes more increasingly difficult for humans to work without the assistance of machines.

- Displace Jobs. Industries prefer investing in machines as they can work on a daily basis with no break. There is a possibility of large-scale unemployment, since almost every task will be done by the intelligent machines.

- Restricted Work. Artificially intelligent machines are programmed to do certain tasks based on what they are trained to do. Relying on machines to adapt to new environments and be creative is not likely because their thinking zone is restricted to only the algorithms that they have been instructed for.

- With the use of AI machines for almost every single process, mental and thinking abilities of humans will considerably decrease over time.

- Humans are progressively getting more intelligent; that fact is evidenced by what scientists are achieving with robots.

- With the ongoing over-reliance on technology, humans are increasingly getting lazier and dumber.

- Robots are meant to make humans' life easier. Less mundane tasks through automation will free humans up to be increasingly more creative and productive.

- AI machines are completely safe, people may be just projecting their own misuse onto the technology.

- AI machines are not safe at all! Replacing adaptive human behaviour with rigid, task-oriented artificial intelligence could cause the end of humankind as we know it.

DEBATING PLANS

PREMIUM 30-PAGE DEBATING LESSONS ON DOZENS OF TOPICS

These lessons are extensive and includes a magazine-like introduction, a 2-page article, vocabulary section, grammar exercises, and images for discussion. To help students organize their debate, worksheets are included for appropriate language and pros and cons to get them started. In total these lesson plans offer 30 pages of activities and tasks for students.

Environmental Crimes
Debate Lesson Plan
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Contents
• Teacher's notes
• Quotations, conversation questions
• Article
• Grammar practice
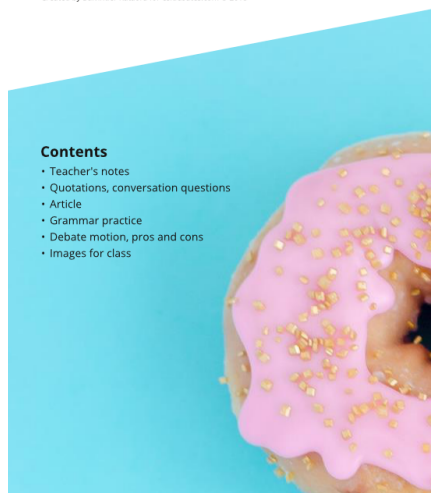• Debate motion, pros and cons
• Images for class

Should natural features be given legal rights to protect them from pollution? This debate will target issues relating to how to legally protect the environment and criminalise pollution.

Food Tax
Debate Lesson Plan
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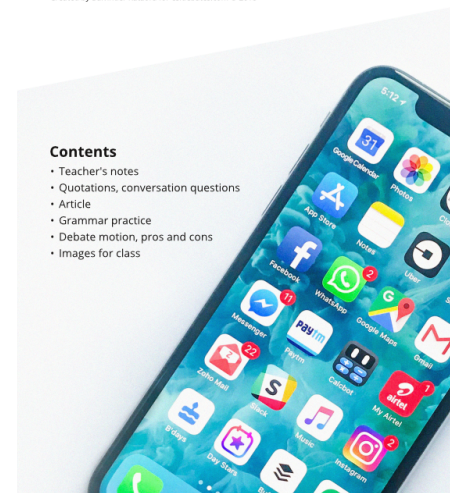• Debate motion, pros and cons
• Images for class

What are the best ways to tackle obesity? Some people advocate better food education, while others want to tax people to change their spending habits. Which is the most effective?

Social Media
Debate Lesson Plan
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People are becoming increasingly concerned about social media. Discuss the main issues and find out what your students think and why.