Grade: 3rd
Strategy: Visualizing
Technique: Mind Mapping
Text Type: Media Literacy

Can Robots Think?

Aims of the Lesson:

- Help students visually organize information about robots, their abilities, and artificial intelligence using a mind map.
- Develop students' critical thinking by comparing human intelligence with artificial intelligence.
- Encourage discussions on the future of robots and their impact on daily life

Text for lesson:

Robots are special machines invented and programmed by humans. A robot is like an automatic machine that can move. They also have sensors that help them recognize objects or colors. Robots can do many things, such as building cars, cleaning floors, or playing chess. Some even look like humans.

But can robots think? The answer is not simple. First, we need to understand what thinking means. Is it just solving a task? Or does thinking also mean having feelings and knowing what is right or wrong? Robots can do some things better than humans, but they don't have feelings or experiences. They cannot laugh, cry, feel happy, or get angry.

We don't know what the future will bring. Technology is advancing quickly. Now, there is artificial intelligence (AI), which is a completely new technology. AI-powered robots can learn by themselves. They keep improving. They can recognize their surroundings, make decisions, and complete tasks on their own. Will they become more like us in the future?

Process Phase 1: Planning (Teacher's Perspective)

- Identifies 3 key words and explains them to the students.
  - **Robot**: A machine that can move and do tasks, sometimes on its own.
  - **Computer:** A machine that helps people work, play, and find information.
  - **Brain:** The part of the body that helps humans think and make decisions.
- Select 3 pictures and ask the students what they see.

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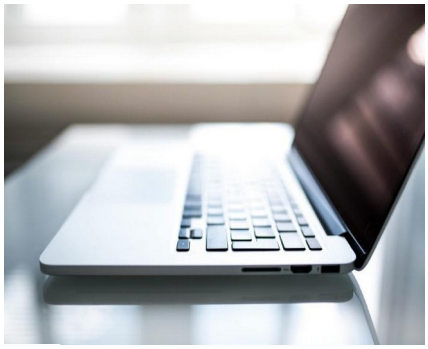

- Prepares **mind map template**.

Robots			
Abilities	**Thinking**	**Learning**	**Future**

- Explains the purpose of **mind mapping** and how it helps in understanding the text.
- Writes keywords, vocabulary, or concepts on the board and distributes handouts.
- Provides guiding questions:
  - *What are robots used for?*
  - *Can robots have feelings?*
  - *What is artificial intelligence?*
  - *How might robots change in the future?*
- Instructs students to brainstorm ideas and create a **preliminary mind map** based on prior knowledge.

Cognitive Stage 1: Pre-Reading (Student's Perspective)

- Observes keywords and visuals provided by the teacher and uses them to create a mental image of the text.
- Uses these visualizations to predict what the text will be about.

Process Phase 2: Teaching (Teacher's Perspective)

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- Divides students into **four groups**, assigning each group a **specific section** of the mind map:
  - **Group 1: Abilitie**s What robots can do.
  - **Group 2: Thinking**The difference between human thinking and robot intelligence.
  - **Group 3: Learning** Artificial intelligence and how robots learn.
  - **Group 4: Future** The future of robots and how they might change.
- Guides students to read the text and **fill in their assigned section** of the mind map.
- Monitors student progress, ensuring they make logical connections.
- Asks guiding questions to help students think critically:
  - *How are robots and humans different?*
  - *Can robots decide things by themselves?*
  - *What will robots do in the future?*

Cognitive Stage 2: During Reading (Student's Perspective)

- Reads the assigned section of the text carefully.
- Works in groups to **fill out the mind map with relevant details**.

Process Phase 3: Feedback (Teacher's Perspective)

- Organizes a **gallery walk activity**:
  - Each group selects a **presenter** to explain their mind map.
  - Other students **observe, ask questions, and make additions** to other maps.
- Leads a **whole-class discussion**:
  - *Can robots think like people?*
  - *What can a robot help you do?*

Cognitive Stage 3: Post-Reading (Student's Perspective)

- Participates in the **gallery walk**, either as a **presenter** explaining their group's mind map or as a **visitor** observing and asking questions.

Modes of Communication (Skills):

- **Interpretive (Receptive)**: Students listen to the teacher's explanation of key words **(robot, computer, brain)** and read the text. After reading, they listen to their peers and review their mind maps to make modifications or additions.

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- **Interpersonal (Mixed):** Students collaborate in groups to categorize information into robot abilities, thinking, learning, and the future. They discuss and negotiate the structure of their mind maps, ensuring logical sequencing.
- **Presentational (Productive):** Students present their completed mind maps to the class, explaining the capabilities of robots and the impact of artificial intelligence. They summarize key details and reflect on how robots might change in the future.

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