School: DO DANG TUYEN

Teacher's name: LE THI AI THI

Class: 12/7 & 12/12

LESSON PLAN

(Based on Official Letter No. 5512/BGDĐT-GDTrH dated December 18, 2020 of the MOET)

UNIT 6: ARTIFICIAL INTELLIGENCE
Lesson 1: Getting started – A visit to a high-tech centre

I. OBJECTIVES
By the end of this lesson, Ss will be able to:
1. Knowledge
- Gain an overview about the topic Artificial intelligence;
- Gain vocabulary to talk about robots and Artificial intelligence;
- Get to know the language aspects: Active and Passive Causatives.
2. Competences
- Develop communication skills and creativity;
- Be collaborative and supportive in pair work and teamwork;
- Actively join in class activities.
3. Personal qualities
- Be aware of the advantages of AI applications like robots.
- Develop self-study skills.

II. MATERIALS
- Grade 12 textbook, Unit 6, Getting started
- Computer connected to the Internet
- Projector / TV
- *hoclieu.vn*

Language analysis

Form	Pronunciation	Meaning	Vietnamese equivalent
1. virtual (adj)	/ˈvɜːtʃuəl/	made to appear to exist by the use of computer software, for example on the internet	ảo
2. exhibition (n)	/ˌeksɪˈbɪʃn/	a collection of things, for example works of art, that are shown to the public	triển lãm

| 3. activate (v) | /ˈæktɪveɪt/ | to make something such as a device or chemical process start working | kích hoạt |
| 4. facial recognition (n) | /ˌfeɪʃl rekəgˈnɪʃn/ | technology that allows a computer to identify a person by their face | nhận diện khuôn mặt |

Assumption

Anticipated difficulties	Solutions
Students are reluctant to work in groups.	- Encourage students to work in pairs and in groups so that they can help each other. - Provide feedback and help if necessary.
Students may lack vocabulary to deliver a speech.	- Explain expectations for each task in detail. - Continue to explain task expectations in small chunks (before every activity). - Provide vocabulary and useful language before assigning tasks. - Encourage students to work in groups so that they can help each other.

III. PROCEDURES

1. WARM-UP (5 mins)

a. Objectives:

- To stir up the atmosphere and activate students' knowledge on the topic;
- To set the context for the listening and reading part;
- To enhance students' skills of cooperating with teammates.

b. Content:

- Crossword

c. Expected outcomes:

- Students can revise vocabulary related to the topic and guess the keyword.

d. Organisation:

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Crossword (PPT slides) - Teacher divides the class into four teams. - Teacher gives each team a handout of a crossword puzzle for them to solve. - The first team to finish the task and get the correct keyword will be the winner of the game.	- Students work in groups. - Students work together and solve the crossword. - Students check the answers and take notes on the important words.	1. A**R**TIFICIAL 2. TECHN**O**LOGY 3. LA**B**ORATORY 4. AUT**O**MATIC 5. IN**T**ELLIGENCE 6. **S**CIENTIST 1. not real , made or produced to copy something natural

- Teacher checks each word. Give further explanation if necessary. - Teacher leads in the lesson.		2. scientific knowledge used in practical ways in industry, for example in designing new machines 3. a room or building used for scientific research, experiments, testing, etc. 4. having controls that work without needing a person to operate them 5. the ability to learn, understand, and make judgments or have opinions that are based on reason 6. a person who studies or is an expert in one or more of the natural sciences => **Keyword: ROBOTS**

e. Assessment

- T observes and gives feedback.

2. ACTIVITY 1: PRESENTATION (5 mins)

a. Objectives:

- To provide students with new words related the topic;

- To help students be well-prepared for the listening and reading tasks.

b. Content:

- Vocabulary pre-teaching

c. Expected outcomes:

- Students can identify some new words related to the topic.

d. Organisation

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Vocabulary pre-teaching - Teacher introduces the vocabulary. - Teacher explains the meaning of the new vocabulary by pictures. - Teacher checks students' understanding with the "Rub out and remember" technique. - Teacher reveals that these five words will appear in the reading text and asks students to open their textbook to discover further.	- Students listen to the teacher's explanation and guess the words. - Students write down the new words in their notebook.	**New words:** 1. virtual (adj) 2. exhibition (n) 3. activate (v) 4. facial recognition (n)

e. Assessment

- Teacher checks students' pronunciation and gives feedback.

- Teacher observes students' writing of vocabulary in their notebooks.

3. ACTIVITY 2: PRACTICE (22 mins)

a. Objectives:

- To introduce the unit topic (Artificial Intelligence);
- To introduce some vocabulary and the grammar point to be learnt in the unit;

b. Content:

- Task 1: Listen and read. (p.76)
- Task 2: Read the conversation again and answer the questions. (p.77)
- Task 3: Find words in Task 1 with the following meanings (p.77)
- Task 4: Complete the sentences with words or a phrase from Task 1 (p.77)

c. Expected outcomes:

- Students can thoroughly understand the content of the text and complete the tasks successfully.

d. Organisation

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Task 1: Listen and read. (6 mins)		
- Set the context for listening and reading the conversation. Have Ss look at the pictures, the heading and the speakers' names. Ask Ss questions about them, e.g. *What can you see in the two photos?* (photo 1: a technology center; photo 2: a robot and a student); *Which activity do you think the students are attending?* (a field trip to a high-tech centre); *Who might be the tour guide*? (The robot) Encourage Ss to use their imagination and accept all answers. Then explain that they are visiting a high-tech centre. - Play the recording twice for Ss to listen and read along. Have Ss underline words / phrases related to artificial intelligence in the conversation. - Have Ss compare the words they have underlined in pairs and discuss their meaning. Then check comprehension as a class. - Call on three Ss to read the conversation aloud. - Note: We'd normally use 'it' for a robot, unless it is given a male or female name.	- Students look at the picture and answer the questions. - Students listen to the recording. - Students underline words/phrases related to artificial intelligence in the conversation. - Students compare the words and phrases with their partners. - Students read the conversation aloud.	*Questions:* 1. *What can you see in the two photos?* 2. *Which activity do you think the students are attending?* 3. *Who might be the tour guide*? *Suggested answers:* 1. photo 1: a robot in a technology center; photo 2: a robot and 2 students 2. A field trip to a high-tech centre 3. The robot
Task 2: Read the conversation again and answer the questions. (5 mins)		

- Ask Ss to work in pairs and look at the four questions carefully. Ask them to underline the keywords in each question (*E.g: 1-Why, Nam, excited; 2- What, robots, do; 3 –What, examples, AI applications; 4- Where, Mai, see, facial recognition screen*). Then read the conversation and locate the part of the conversation that contains the information. - Call out each blank and have different pairs provide their answers. - Confirm the correct answers.	- Students work independently to do the activity. - Students compare the answers in pairs.	*Answer key:* 1. Because he has never met a talking robot before. 2. They can answer questions and translate from different languages. 3. Facial recognition and virtual assistants. 4. At the entrance of the centre.
Task 3: Find words in Task 1 with the following meanings (6 mins)		
- Ask Ss to read the given meanings and suggested letters to identify the type of words (adjective, verb or nouns) - Have Ss read the conversation quickly again, and find words which contain the suggested letter and have the same or similar mearning to the given meanings. - Call on individual S to write the answers on the boards. Check answers as a class.	- Students read the conversation again and work independently to do the activity. - Students share and check the answers.	*Answer key:* 1. capable 2. activated 3. applications 4. recognition
Task 4: Complete the sentences with words or a phrase from Task 1. (5 mins)		
- Have Ss read the four sentences and check understanding. Ask them to focus on the phrases before each blank (have/get + Object) and types of words they need to fill in each blank. - In weaker classes, encourage Ss to read the conversation again and underline the sentences which have the same information. Then try to fill in the correct verbs. - Check answers by calling on individual Ss to read out each sentence.	- Students work individually to complete the sentences - Students share and check the answers.	*Answer key:* 1. taken 2. to take 3. activated 4. checked

e. Assessment
- Teacher checks students' exercises individually and gives feedback.

4. ACTIVITY 3: PRODUCTION (10 mins)
a. Objectives:

- To help Ss memorize the key information about the science and technology;
- To get Ss to speak about the main features of Jessica – the robot in the reading text.

b. Content:
- Role-play: Jessica - the AI robot

c. Expected outcomes:
- Ss can talk about the main features of Jessica – the robot in the reading text and some science and technology knowledge related to AI.

d. Organisation

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Role-play: Jessica - the AI robot (10 mins)		
- Teacher lets Ss work in groups of 4. In each group, one student plays the role of Jessica – the robot, others are students who visit the high-tech centre. - Give instructions to students. - Ask students to do a role-play, others students may ask Jessica about what she can do. - Some cues questions to ask Jessica: + *Which special abilities do you have?* + *What are your strengths and weaknesses?* + *Which AI technology will be popular in the future?* - Teacher asks to use their imagination and creativity in the role play together with the information provided in the reading text. - Teacher calls on some groups to present their stories. - Teacher asks other groups to listen and give comments. - Teacher gives feedback and gives marks to the best group.	- Students work in groups to follow teacher's instructions. - Students perform in front of the class.	*Students' own creativity*

e. Assessment
- Teacher's observation on Ss' performance.
- Teacher's feedback and peers' feedback.

5. CONSOLIDATION
a. Wrap-up
- Teacher asks students to talk about what they have learnt in the lesson.
b. Homework
- Do exercises in the workbook.
- Prepare for the project in Lesson 8

Board plan

Date of teaching
Unit 6 Artificial Intelligence
Lesson 1: Getting started

* Warm-up

* Vocabulary
1. virtual (adj)
2. exhibition (n)
3. activate (v)
4. facial recognition (n)

- Task 1: Listen and read.
- Task 2: Answer the questions
- Task 3: Find words with the following meanings.
- Task 4: Complete the sentences.
- Role-play

*Homework

UNIT 6: ARTIFICIAL INTELLIGENCE
Lesson 2: Language

I. OBJECTIVES
By the end of this lesson, Ss will be able to:
1. Knowledge
- Identify and pronounce the homophones in words and sentences correctly.

- Understand and use words and phrases related to science and technology.

- Understand and use active and passive causatives correctly.

2. Competences
- Develop communication skills
- Be collaborative and supportive in pair work and team work

- Actively join in class activities.

3. Personal qualities
- Be aware of the advantages of AI applications like robots.
- Develop self-study skills.

II. MATERIALS
- Grade 12 textbook, Unit 6, Language
- Computer connected to the Internet
- Printed worksheets
- Projector / TV
- *hoclieu.vn*

Language analysis

<p style="text-align:center; color:orange;">Active and passive causatives</p>

> **• The active causative is used when the subject causes the object to do something. The pattern means 'to cause someone to do something'.**
>   have + someone + bare infinitive
>   get + someone + to-infinitive
> *Example: The AI expert* had *his assistant* activate *the new robot. I will* get *more people* to join *the technology club.*
> **• The passive causative is used when the thing is done for the subject by someone else. The pattern means 'to cause something to be done'.**
>   have/get + something + past participle
> *Example: The AI expert* had/got *the new robot* activated*.*

Assumption

Anticipated difficulties	Solutions
Students may lack knowledge about some lexical items.	Provide students with the meaning and pronunciation of some lexical items.
Students may have underdeveloped listening, speaking and co-operating skills.	- Play the recording many times if necessary. - Encourage students to work in pairs, in groups so that they can help each other. - Provide feedback and help if necessary.

Some students will excessively talk in the class.	- Define expectation in explicit detail. - Continue to define expectations in small chunks (before every activity).

III. PROCEDURES
1. WARM-UP (5 mins)
a. Objectives:
- To stir up the atmosphere and activate students' knowledge on the topic;
- To enhance students' skills of cooperating with teammates.

b. Content:
- Homophone game

c. Expected outcomes:
- Students can get ready to know about homophones.

d. Organisation:

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Homophone game - Let Ss work in groups of 4. - Give each group a worksheet, in which Ss have to write the suitable words under the pictures. The words are also provided in the worksheet. - The first group to complete the task successfully is the winner. - Teacher goes around to help Ss when necessary. - Teacher checks the answer for each group which finishes the task early. - Teacher checks the answer with the whole class and leads in the lesson.	- Students work in groups to do the activity. - Students check the answers.	*Suggested cards:*

		ate	pair	hair	sale
		eight	blew	hare	ball
		night	blue	won	bawl
		knight	flour	one	see
		pear	flower	sail	sea
		flew			
		flu			
		mail			
		male			

e. Assessment

- Teacher observes and gives feedback.

2. ACTIVITY 1: PRONUNCIATION (12 mins)

a. Objectives:

- To help Ss recognise and practise homophones.

- To help Ss practise identifying homophones.

b. Content:

- Task 1: Listen and repeat the following homophones. (p.78)

- Task 2: Choose the correct words to complete the sentences. Listen and repeat. Then practise saying the sentences in pairs. (p.78)

c. Expected outcomes:

- Students can distinguish homophones and use the correct words in a complete sentence.

d. Organisation

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Task 1: Listen and repeat the following homophones. (6 mins)		
- Write two 'buy, bye' on the board and call on one or two Ss to read it. Ask Ss to identify the similarity and differences between these two words. Refer to the Remember box to introduce homophones. Homophones are words that have the same pronunciation but different spelling and meanings. *Example: I have <u>two</u> books, <u>too</u>.* */tu:/* */tu:/* - Play the recording and ask Ss to listen and repeat, paying attention to the words. Play the recording two or three times. - For strong classes, cover the second column and ask Ss to find the homephones to the words in the first column.	- Answer teacher's question, identify the similarity and differences between these two words. - Students listen to the recording, and then repeat the words.	***Students' practise***
Task 2: Choose the correct words to complete the sentences. Listen and repeat. Then practise saying the sentences in pairs. (6 mins)		
- Ask Ss to read the sentences. Check comprehension. - Have Ss underline the suitable words to make a complete sentence individually. Then ask them to work in pairs to compare their answers.	- Students read the sentences and underline suitable words. Then listen to the recording. - Students check answers. - Students read the whole text aloud.	*Answer key:* 1. There are more than ***two*** types of robots. 2. We want to know ***where*** AI technologies are used today.

- Check answers as a class by playing the recording. Pause after each sentence and confirm the answers. - Put Ss in pairs and have them practise reading the sentences aloud. **Extension**: *Ss work in pairs and make up new sentences using words which contain homophones. Then they take turns to read out their sentences and the other S has to tell which words are homophones and write down the two words.*		3. ***There*** have been some worries about AI taking over the world. 4. Robots can work for long ***hours*** without feeling tired. 5. We have ***no*** idea about the future of AI in space exploration.

e. Assessment

- Teacher checks students' pronunciation and gives feedback.

- Students in class listen and give feedback on their friends' performance.

3. ACTIVITY 2: VOCABULARY (12 mins)

a. Objectives:

- To introduce words / phrases related to the topic *Science and technology*.

- To help Ss practise the words in meaningful contexts.

b. Content:

- Task 1: Match the words with their meanings. (p.78)

- Task 2: Complete the sentences using the correct forms of the words from Task 1. (p.79)

c. Expected outcomes:

- Students understand the meaning of words, memorise them and are able to use them in meaningful contexts.

d. Organisation

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Task 1: Match the words with their meanings. (6 mins)		
- Ask Ss to work in pairs, read five words and do the matching. - Check answers as a class. Call on one student to read aloud a word and on another student to read its definition. - In stronger classes, show Ss the meanings, the number of letters in those words/phrases and the beginning letter, and ask them to guess. They can do that in pairs or small groups. - In weaker classes, do the first one as an example before asking Ss to match the rest individually or in pairs.	- Students match each word/phrase on the left with the one on the right - Students study the meanings and underline key words.	*Answer key:* 1. c 2. a 3. e 4. d 5. b
Task 2: Complete the sentences using the correct forms of the words from Task 1. (6 mins)		
- Ask Ss to work individually. Tell them to read the sentences carefully to decide which word in **1** can be used to complete each of the sentences. Remind them to use the	- Students read the sentences carefully and decide which words can be used.	*Answer key:* 1. Artificial intelligence 2. advanced 3. programmed

contextual clues to decide on the word/phrase as well as the correct forms. E.g. 3. Needs a plural noun after "many". - Have Ss compare their answers in pairs. Check answers as a class. Have individual Ss call out the word they have used for each sentence first. - Confirm the correct answers. In stronger classes, ask Ss to explain why they have chosen the word for each sentence using contextual clues, e.g. *The first sentence needs a noun and it refers to a part of people's life. The second sentence needs an adjective to go with 'type of robot', and the word 'advanced' is the best choice.*	- Students explain the meaning of each phrase. - Students read the complete sentences.	4. analyse 5. chatbots

e. Assessment

- Teacher's observation on Ss' performance.
- Teacher's feedback and peers' feedback.

4. ACTIVITY 3: GRAMMAR (13 mins)
a. Objectives:
- To help Ss review how to use active and passive causatives.
- To help Ss practise using causatives in a speaking activity.
b. Content:
- Task 1: Rewrite the sentences using active or passive causatives. (p.79)
- Task 2: Work in pairs. Make predictions about applications of robots in the future, using causatives. (p.79)
c. Expected outcomes:
- Students know how to use active and passive causatives and can apply it to give a short talk on the given topic.
d. Organisation

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Task 1: Rewrite the sentences using active or passive causatives. (6 mins)		
- Tell Ss to look at the sentences using active and passive causatives in Activity 4 in GETTING STARTED. Elicit the active and passive causative, e.g. What is the type of object after "have/get"*? What are the forms of verbs after these objects?* - Have Ss read the explanation and examples in the Remember! box. Check understanding and provide more examples if necessary. - Ask Ss to work individually to rewrite the sentences using the given subjects. Remind	- Students read the notes in the Remember box. - Students rewrite the sentences using the given subjects. - Students explain their answers.	*Answer key:* 1. I have a robot clean my house every day. / I get a robot to clean my house every day. / I have/get my house cleaned every day by a robot. 2. My dad had/got our robot vacuum cleaner repaired. 3. We had a robot put together our new

		furniture in 10 minutes. / We got a robot to put together our new furniture in 10 minutes. / We had/got our furniture put together in 10 minutes by a robot. 4. He will have/get his computer upgraded to improve its performance.

Task 2: Work in pairs. Make predictions about applications of robots in the future, using causatives. (7 mins)		
- Have Ss read the instruction and example, make sure they all understand the context and what they have to do. - Point to the example and the causative in these sentences. Ask: Which sentence uses active causative and which uses passive causative? - Put Ss in pairs to make predictions about the future applications of robots in their life, using active or passive causatives. - In stronger classes, set a time limit of four minutes and have pairs come up with as many sentences as they can. - Invite pairs to share their sentences with the whole class.	- Students work in pairs and make predictions about the future applications of robots in their life, using active or passive causatives. - Present their ideas in front of class.	*Suggested answers:* People will have robots perform surgery/take care of patients in hospitals. Students will have their essays written by robots. We will have robots deliver goods to our doorsteps. Parents will have robots babysit their young children.

e. Assessment

- Teacher's observation on Ss' performance.

- Teacher's feedback and peers' feedback.

5. CONSOLIDATION (3 mins)

a. Wrap-up

- T asks Ss to talk about what they have learnt in the lesson.

b. Homework

- Do exercises in the workbook.

- Prepare for Lesson 3 - Reading.

Board plan

Date of teaching **Unit 6: Artificial Intelligence** **Lesson 2: Language** *** Warm-up** Homophone game *** Pronunciation**

- Task 1. Listen and repeat.
- Task 2. Choose the correct words.
* Vocabulary
- Task 1. Match the words with their meanings.
- Task 2. Complete the sentences.
* Grammar
- Task 1. Rewrite the sentences using active or passive causatives.
- Task 2. Make predictions about applications of robots in the future.

* Homework

UNIT 6: ARTIFICIAL INTELLIGENCE
Lesson 3: Reading – AI applications in education

I. OBJECTIVES
By the end of this lesson, Ss will be able to:
1. Knowledge
- Develop reading skills for general ideas and for specific information in an article about AI applications in education.
2. Competences
- Develop communication skills and creativity.
- Be collaborative and supportive in pair work and teamwork.
- Develop presentation skills
- Actively join in class activities.
3. Personal qualities
- Be aware of the advantages of AI applications like robots.
- Develop self-study skills.

II. MATERIALS
- Grade 12 textbook, Unit 6, Reading
- Computer connected to the Internet
- Printed handouts
- Projector / TV
- *hoclieu.vn*

Language analysis

	Form	Pronunciation	Meaning	Vietnamese equivalent
1.	portfolio (n)	/pɔːtˈfəʊliəʊ/	a collection of photographs, drawings, etc. that you use as an example of your work	bộ tài liệu
2.	effortlessly (adv)	/ˈefətləsli/	in a way that needs little or no effort, and that seems easy	không tốn sức
3.	concept (n)	/ˈkɒnsept/	an idea or a principle that is connected with something abstract	khái niệm
4.	personalise (v)	/ˈpɜːsənəlaɪz/	to mark something in some way to show that it belongs to a particular person	cá nhân hóa
5.	conversational (adj)	/ˌkɒnvəˈseɪʃənl/	not formal; as used in conversation	trong giao tiếp thông thường

Assumption

Anticipated difficulties	Solutions
Students may lack knowledge about some lexical items.	Provide students with the meaning and pronunciation of words.
Students may have underdeveloped reading, speaking and co-operating skills.	- Let students read the text again (if necessary). - Create a comfortable and encouraging environment for students to speak. - Encourage students to work in pairs, in groups so that they can help each other. - Provide feedback and help if necessary.

III. PROCEDURES

1. WARM-UP (5 mins)

a. Objectives:

- To stir up the atmosphere and activate students' knowledge about the figure they are going to learn about in the lesson;
- To set the context for the reading part;
- To enhance students' skills of cooperating with teammates.

b. Content:

- Reveal the secret word

c. Expected outcomes:

- Students join the activity enthusiastically and gain knowledge on the topic.

d. Organisation:

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Reveal the secret word - Teacher prepares printed handouts of the passage. - Teacher lets Ss work in groups. - Teacher delivers a handout to each group, in which students have to fill in the blanks with suitable words. - Teacher asks students to guess the secret key word after they have completed the task. - The first group to do the task successfully and get the correct key word is the winner of the game. - Teacher leads in the lesson.	- Students work in groups to do the activity. - Students raise their hands to answer the questions.	*Reading passage:* In the rapidly evolving world of education, technology has become a (1) _____ behind innovation and transformation. Among the many (2) _____ technologies making waves in the educational landscape is KEY WORD HERE. It has emerged as a powerful tool for transforming learning experiences through AI conversations. an advanced natural language processing model, is designed to understand and generate (3) _____ text based on the input it receives. It operates on the principles of deep learning, leveraging large-scale datasets to pre-train its language comprehension abilities. By employing this (4) _____ AI conversational tool in education, the learning process is elevated to new heights, offering students and

		educators unique (5) _____ for growth and collaboration.
		Answer key: 1. driving force 2. cutting-edge 3. human-like 4. sophisticated 5. opportunities **KEY WORD:** **ChatGPT (Generative Pre-trained Transformer)**

e. Assessment
- Teacher observes and gives feedback.

2. ACTIVITY 1: PRE-READING (9 mins)
a. Objectives:
- To get students learn vocabulary related to the topic;
- To activate prior knowledge about the topic and get Ss involved in the lesson.
b. Content:
- Task 1: Work in groups. Discuss what the pictures in the article below show and where you might see them. (p.80)
- Pre-teach vocabulary
c. Expected outcomes:
- Students can identify some vocabulary related to the topic.
d. Organisation

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Task 1. Work in groups. Discuss what the pictures in the article below show and where you might see them. (4 mins)		
- If possible, play video clips showing different applications of AI in life (robots, speech recognition…) to spark Ss' interest in the topic and ask them what they are going to read. - Put Ss into pairs to discuss the two given pictures (*what they are; where they might see them*) - Call on some pairs to share their answers. - Introduce the topic of the reading text.	- Students work in pairs and answer the questions. - Students discuss the two given pictures. - Students share their answers.	*Suggested answers:* Pic 1. Chatbots Pic 2. Virtual reality We might find the first application in social media messaging apps, messaging platforms and websites, and on browsers and phone calls. We might find virtual reality applications in video games, amusement park rides, field trips in classrooms, museums, guided tours of tourist destinations, etc.

Vocabulary pre-teaching (5 mins)		
- Teacher introduces the vocabulary. - Teacher explains the meaning of the new vocabulary by pictures. - Teacher checks students' understanding with the "Rub out and remember" technique. - Teacher reveals that these five words will appear in the reading text and asks students to open their textbook to discover further.	- Students listen to the teacher's explanation and guess the words. - Students write down the new words in their notebook.	*New words:* 1. portfolio (n) 2. effortlessly (adv) 3. concept (n) 4. personalise (v) 5. conversational (adj)

e. Assessment
- Teacher checks students' pronunciation and gives feedback.
- Teacher observes Ss' writing of vocabulary in their notebooks.

3. ACTIVITY 2: WHILE-READING (20 mins)
a. Objectives:
- To get Ss to practise guessing the meaning of words from context;
- To help Ss develop reading skills for general information;
- To help Ss develop reading skills for specific information.
b. Content:
- Task 2: Read the article. Choose the correct meanings of the highlighted words. (p.80)
- Task 3: Read the article again and choose the correct answer A, B, C, or D (p.81)
- Task 4: Complete each of the following sentences with one word from the article. (p.81)
c. Expected outcomes:
- Students can thoroughly understand the content of the text and complete the tasks successfully
d. Organisation

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Task 2: Read the article. Choose the correct meanings of the highlighted words. (6 mins)		
- Have Ss look through the four words, identify their part of speech (*1.a noun; 2. an adjective; 3. an adjective; 4. a noun*) and guess their meanings first. Then locate the words in the article. - Ask them to study the context including the sentences containing the words as well as neighbouring sentences carefully. They may replace the word with each choice to see which one best replaces the word. - Call on individual Ss to say out their answers. Check answers as a class.	- Students read the text and locate the highlighted words individually. - Students study the context and do the tasks as required.	*Answer key:* 1. C 2. B 3. A 4. B
Task 3: Read the article again and choose the correct answer A, B, C, or D (7 mins)		
- Ask Ss to read the questions and four options, and underline the key words in each of them, e.g. Question 1: What, students, Singapore, upload, digital portfolio*;*	- Students read the questions and four options, and underline the key words in each of them.	*Answer key:* 1. C 2. B 3. A

Question 2: Which, AI chatbots, NOT do; Question 3*: Which, one benefit, using VR, Hong Kong schools;* Question 4*: Which group, NOT benefitted, Personalised learning app;* Question 5*: Which AI applications, helpful, students, need, additional tutoring.* - Check whether Ss have got the right keywords. - Ask Ss to scan the text to locate the key words, as well as paraphrases of these keywords. Then choose the option that matches the information in the text. Remind them to watch out for question 2 and question 4 (negative facts) where they have to eliminate the options containing correct information mentioned in the article. - Have Ss work in pairs or groups to compare answers. - In weaker classes, check answers as a class and give the clues by highlighting the phrases or sentences that contain the information in the article. E.g, the answer to question 1 is in the fourth sentence of paragraph A, "*This app collects data from the learning and work experience that students upload onto the app*". "*learning and work experience that students upload onto the app*" is similar to option C "*their study and work experience*". For question 2, students will eliminate all the options that are mentioned in paragraph B (Option A. *explain lessons = explain concepts clearly;* Option C. *answer questions; Option D. comment on homework = give feedback on homework*) and choose B as the answer. - In stronger class, ask Ss to explain their answers by providing clues from the text.	- Students scan the text to locate the key words, as well as paraphrases of these keywords. - Students choose the option that matches the information in the text - Students check answers with the whole class and give explanations for their choice.	4. B 5. D
Task 4: Complete each of the following sentences with one word from the article. (7 mins)		
- Ask Ss to read the four sentences, and identify the part of speech that is needed to fill in each blank, e.g. Question 1: a noun as subject *2: a noun of place* after the preposition *"on";* Question 3*: a noun* after *"the";* Question 4*: a noun* that goes with *distance-leaning* to form a meaningful phrase. Then identify the paragraph where they can find the missing words. E.g.	- Students read the four sentences and identify the part of speech that is needed to fill in each blank. - Students scan each paragraph to locate the missing words - Students compare their answers with partners then check with the whole class.	*Answer key:* 1. Students 2. chatbots 3. history 4. platform

Question 1: paragraph A, question 2: paragraph B; question 3: paragraph C; question 4: paragraph D. - Ask Ss to scan each paragraph to locate the missing words. - Have Ss work in pairs or groups to compare answers. Check answers as a class.		

e. Assessment

- Teacher's observation on Ss' performance.

- Teacher's feedback and peers' feedback.

4. ACTIVITY 3: POST-READING (8 mins)

a. Objectives:

- To help Ss use the ideas and language in the reading to express their opinions

b. Content:

- Task 5: Work in groups. Discuss the following question.

Which of the AI applications do you think your school can adopt? (p.81)

c. Expected outcomes:

- Students can use the language and ideas from the unit to talk about the use of AI applications in their own school.

d. Organisation

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Task 5: Work in pairs. Discuss the following question. *Which of the AI applications do you think your school can adopt?*		
- Put Ss into pairs. Have them discuss the question. - Invite some pairs to share their answers with the whole class. - Ask other Ss to give comments and correct any mistakes if possible. - Praise for interesting ideas and fluent delivery.	- Students practise speaking in pairs. - Students share their answers with the whole class. - Students listen and give feedback.	*Suggested answers:* We think that our school can adopt educational chatbots. This is a great application that can provide additional support to students outside of class time. Educational chatbots can also tutor weaker students. This way these students will be able to keep up with their schoolwork. This will also reduce the workload of many teachers.

e. Assessment

- Teacher's observation on Ss' performance.

- Teacher's feedback and peers' feedback.

5. CONSOLIDATION (3 mins)

a. Wrap-up

- Teacher asks students to talk about what they have learnt in the lesson.

b. Homework

- Do exercises in the workbook.

- Prepare for the next lesson – Speaking.

Board plan

Date of teaching
Unit 6: Artificial Intelligence
Lesson 3: Reading

* Warm-up
Reveal the secret word

Vocabulary
1. portfolio (n)
2. effortlessly (adv)
3. concept (n)
4. personalise (v)
5. conversational (adj)

- Task 1: Discuss the pictures in the article.
- Task 2: Choose the correct meanings.
- Task 3: Choose the correct answer.
- Task 4: Complete the sentences.
- Task 5: Discussion.

* Homework

UNIT 6: ARTIFICIAL INTELLIGENCE
Lesson 4: Speaking – Applications of AI in education

I. OBJECTIVES
By the end of this lesson, Ss will be able to:
1. Knowledge
- Gain an overview about applications of AI in education;
- Memorise vocabulary to talk about applications of AI in education.
2. Competences
- Develop communication skills;
- Be collaborative and supportive in pair work and teamwork;
- Actively join in class activities.
3. Personal qualities
- Be aware of the advantages of AI applications in education.
- Develop self-study skills.

II. MATERIALS
- Grade 12 textbook, Unit 6, Speaking
- Computer connected to the Internet
- Projector / TV
- *hoclieu.vn*

Language analysis

Form	Pronunciation	Meaning	Vietnamese equivalent
1. ready-made (adj)	/ˌredi ˈmeɪd/	prepared in advance so that you can eat or use it immediately	làm sẵn
2. feedback (n)	/ˈfiːdbæk/	advice, criticism or information about how good or useful something or somebody's work is	nhận xét
3. virtual reality (n)	/ˌvɜːtʃuəl riˈæləti/	images and sounds created by a computer that seem almost real to the user, who can interact with them by using sensors	thực tế ảo
4. critical thinking (n)	/ˌkrɪtɪkl ˈθɪŋkɪŋ/	the process of analysing information in order to make a logical decision about the extent to which you believe something to be true or false	tư duy phản biện

Assumption

Anticipated difficulties	Solutions

Students may lack vocabulary to deliver a speech.	- Provide vocabulary and useful language before assigning tasks. - Encourage students to work in groups so that they can help each other. - Give short, clear instructions and help if necessary.

III. PROCEDURES

1. WARM-UP (5 mins)

a. Objectives:

- To stir up the atmosphere and activate students' knowledge on the topic;
- To set the context for the speaking part.

b. Content:

- Watch a video

c. Expected outcomes:

- Students join the game enthusiastically and gain knowledge on the topic.

d. Organisation:

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Video watching - Teacher divides the class into 2 groups. - Before playing the video, teacher asks Ss to watch carefully and try to remember as many details as possible. Ss can take notes if they want. - Teacher shows questions one by one, Ss raise their hands and say BINGO to grab the chance to answer. - If the answer is correct, they get one point for their team. - The team with the higher score will be the winner. - Teacher leads in the lesson.	- Students work in groups to do the activity. - Students watch the video and take notes. - Students raise their hands to answer the questions.	*Link:* https://www.youtube.com/watch?v=1UjXNTyTTvc *Questions:* 1. What is the robot called? *DTR (Dance Teaching by a Robot)* 2. Where was it invented? *Japan* 3. For beginners, what does the robot do? *It guides the dance with low compliance, leading the motion in the correct direction.* 4. Can it evaluate the partner's performance? *Yes. And it can modify its guidance based on it.* 5. What kind of interaction does the robot combine when it supports the skill learning process? *Cognitive and physical interaction*

e. Assessment

- Teacher observes and gives feedback.

2. ACTIVITY 1: CONTROLLED PRACTICE (30 mins)

a. Objectives:

- To provide knowledge and language input for the main speaking task;
- To activate prior knowledge about the topic and get Ss involved in the lesson.

- To help Ss practise talking about applications of AI in education.

b. Content:

- Task 1: Work in pairs. Match each AI application (1–5) with its purpose in learning (a–f).
There can be multiple correct answers (p.82)
- Pre-teach vocabulary
- Task 2: Work in groups. Discuss the questions. (p.82)

c. Expected outcomes:

- Students can identify and gain some vocabulary to complete speaking tasks.
- Students have an overview about the applications of AI in education..

d. Organisation

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Task 1: Work in pairs. Match each AI application (1–5) with its purpose in learning (a–f). There can be multiple correct answers (10 mins)		
- Remind Ss of the reading text about applications of AI in education around the world (digital porfolio, educational chatbots, VR, personalised learning app). - Ask, *Do you know other applications of AI in learning? What are their purposes?;* and encourage Ss to come up with as many points as they can (robots, AI games, speech recognition…) - Then ask Ss to look at the table to see if any of their points are included there. Have them work in pairs and match each AI application with its purposes on learning. - Check answers as a class. Ss may add more purposes to the given applications.	- Students recall information from reading lesson about AI in education around the world (digital porfolio, educational chatbots, VR, personalised learning app). - Students answer the teacher's questions. - Work in pairs and match each AI application with its purposes of learning. - Check answers and add more purposes.	*Suggested answer:* 1. a, c 2. a, d, f 3. a, f 4. b, f 5. a, e, f
Vocabulary pre-teaching (5 mins)		
- Teacher introduces the vocabulary. - Teacher explains the meaning of the new vocabulary with different techniques (pictures, actions, synonyms …) - Teacher checks students' understanding with the "Rub out and remember" technique. - Teacher asks Ss to take notes on their notebooks.	- Students listen to the teacher's explanation and guess the words. - Students write down the new words in their notebook.	*New words:* 1. ready-made (adj) 2. feedback (n) 3. virtual reality (n) 4. critical thinking (n)
Task 2: Work in groups. Discuss the questions.		
- Put Ss in pairs and have them discuss the two given questions. Remind them to take notes of their discussion. - In weaker classes, write some guiding questions on the board and ask Ss to think of the answers to these questions. E.g. *What applications will you choose in your class/school? ; What are their advantages/*	- Students work in pairs to discuss the two given questions. - Look at some useful expressions for discussion in the appendix of the book.	*Suggested answer:* *A: What do you think about chatbots?* *B: I think a chatbot app is an effective application because it can help students*

How can they support your study? What difficulties/challenges you may have when using this app?... - Ask Ss to look at some useful expressions for discussion in the appendix of their book if they need help. - Walk around and provide help if necessary.		*understand difficult concepts and provide instant and personalised support throughout the course.* *C: I agree. If available, we can use it during and after classes to clarify points and get feedback on homework.* *A: Yes, but there are also disadvantages. Chatbots may not be able to answer complex questions that need making decisions.* *B: In addition, if learners always wait for ready-made answers, they may become lazy and may not develop critical thinking skills.* *C: That's a good point. Chatbots can't replace human interaction and lack personal connections.*

e. Assessment
- Teacher gives corrections and feedback.
- Teacher observes Ss' writing of vocabulary in their notebooks.

3. ACTIVITY 2: LESS-CONTROLLED PRACTICE (8 mins)
a. Objectives:
- To give Ss an opportunity to present their group discussion to the class;
- To help some students enhance presentation skills.
b. Content:
- Task 3: Prepare a summary of your discussion and report to the whole class. (p.82)
c. Expected outcomes:
- Students can use the language and ideas from the unit to talk about advantages and disadvantages of each AI application in education.
d. Organisation

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Task 3: **Prepare a summary of your discussion and report to the whole class.**		
- Have a representative from some pairs briefly share their discussion in front of the class.	- Students share their discussion in front of the class.	*Students' own answers*

- Praise for good effort, well-structured responses and fluent delivery.		

e. Assessment
- Teacher observes and gives feedback.

4. CONSOLIDATION (2 mins)
a. Wrap-up
- Teacher asks students to talk about what they have learnt in the lesson.
b. Homework
- Do exercises in the workbook.
- Prepare for the next lesson – Listening.

Board plan

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Date of teaching
Unit 6: Artificial intelligence
Lesson 4: Speaking

* Warm-up
Video watching

* Vocabulary
1. ready-made (adj)
2. feedback (n)
3. virtual reality (n)
4. critical thinking (n)

Task 1: Match each AI application with its purpose in learning.
Task 2: Discuss the questions.
Task 3: Prepare a summary of your discussion and report to the whole class.

* Homework

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UNIT 6: ARTIFICIAL INTELLIGENCE
Lesson 5: Listening – Operating a home robot

I. OBJECTIVES

By the end of this lesson, Ss will be able to:
1. Knowledge
- Gain an overview about a home robot;
- Memorize vocabulary to talk about how to operate a home robot.
2. Competences
- Develop communication skills and creativity;
- Be collaborative and supportive in pair work and teamwork;
- Develop presentation skills.
3. Personal qualities
- Be aware of the advantages of AI applications in education.

II. MATERIALS
- Grade 12 textbook, Unit 6, Listening
- Computer connected to the Internet
- Projector / TV
- *hoclieu.vn*

Language analysis

Form	Pronunciation	Meaning	Vietnamese equivalent
1. command (n)	/kəˈmɑːnd/	an order given to a person or an animal	mệnh lệnh
2. monitor (n)	/ˈmɒnɪtə(r)/	a screen that shows information from a computer; a television screen used to show particular kinds of information	màn hình điều khiển
3. station (n)	/ˈsteɪʃn/	a place where somebody/something has to wait and watch or be ready to do work if needed	nơi chờ
4. function (n)	/ˈfʌŋkʃn/	a special activity or purpose of a person or thing	chức năng

Assumption

Anticipated difficulties	Solutions
Students may lack vocabulary to deliver a speech.	- Provide vocabulary and useful language before assigning tasks. - Encourage students to work in groups so that they can help each other. - Give short, clear instructions and help if necessary.

Students cannot follow the speed of the recording.	- Make sure they understand the meaning and pronunciation of important words. - Teach them the skill of underlining key words in the questions before they listen. - Play more time if necessary.

III. PROCEDURES
1. WARM-UP (5 mins)
a. Objectives:
- To help Ss understand and activate their knowledge of the topic;
b. Content:
- Video watching
c. Expected outcomes:
- Students can join the game and gain knowledge on the topic.
d. Organisation

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Video watching - Teacher divides the class into 2 groups. - Before playing the video, teacher asks Ss to watch carefully and try to remember as many details as possible. Ss can take notes if they want. - Teacher shows questions one by one, Ss raise their hands and say BINGO to grab the chance to answer. - If the answer is correct, they get one point for their team. - The team with the higher score will be the winner. - Teacher leads in the lesson.	- Students work in groups to do the activity. - Students raise their hands to answer the questions.	*Link:* https://www.youtube.com/watch?v=R4RXsBxiQIw *Questions:* 1. What is it? *A robotic vacuum cleaner* 2. Do you have this at home? 3. Do you think it is a useful invention? Why? *- It can do almost all the work of cleaning, which frees your hands and can give you more time to do other, more interesting things.* *- Compared to traditional vacuums, robotic vacuums are much quieter.* *- The mobile application, as a remote-control device, can be used to control the robot, and no extra manual operation is needed.* *- Robotic vacuums are self-charging.*

e. Assessment
- Teacher corrects students (if needed).

2. ACTIVITY 1: PRE-LISTENING (9 mins)
a. Objectives:
- To get students to learn vocabulary related to the topic;
- To activate prior knowledge about the topic and get Ss involved in the lesson.

b. Content:
- Task 1: Work in pairs. Discuss the following questions. (p.82)
- Vocabulary pre-teaching
c. Expected outcomes:
- Students understand the meaning and know how to pronounce some words from the recording.
d. Organisation

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Task 1: Work in pairs. Discuss the following questions. (4 mins)		
- Ask Ss to work in pairs, and discuss the two questions. Explain that a type of robot will be introduced in the recording. - Call on some pairs to share their answers. - Have Ss share what they know about a home robot and their experience if any.	- Work in pairs, and discuss the two questions. - Share the answers. - Share what they know about a home robot and their experience if any.	*Suggested answer:* *I would really love to have a robot to help me in my daily life. It would help me do the housework,* *including cleaning the house, doing the laundry, and cooking meals. It would be perfect if it could play chess, watch TV, and chat about the TV programmes with me in my spare time.*
Vocabulary teaching (5 mins)		
- Teacher introduces the vocabulary. - Teacher explains the meaning of the new vocabulary with different techniques (pictures, actions, synonyms …) - Teacher checks students' understanding with the "Rub out and remember" technique. - Teacher asks Ss to take notes on their notebooks.	- Students say the meaning of the words. - Students write new words in their notebook.	*New words:* 1. command (n) 2. monitor (n) 3. station (n) 4. function (n)

e. Assessment
- Teacher checks students' pronunciation and gives feedback.
- Teacher observes Ss' writing of vocabulary in their notebooks.

3. ACTIVITY 2: WHILE-LISTENING (20 mins)
a. Objectives:
- To help Ss practise listening for specific information;
- To provide Ss with some basic information and how to use a home robot.
b. Content:
- Task 2: Listen to the first part of a conversation between Nam and an AI expert. Decide whether the following statements are true (T) or false (F) (p.82)
- Task 3: Listen to the second part of the conversation and complete each gap in the diagram with no more than TWO words (p.82)
c. Expected outcomes:
- Students can catch the specific details of the recording and complete the tasks successfully.
d. Organisation

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS

Task 2: Listen to the first part of a conversation between Nam and an AI expert. Decide whether the following statements are true (T) or false (F). (10 mins)		
- Have Ss read the four statements, and make guesses before listening. In weaker classes, check understanding. - Ask Ss to underline keywords in each statement, e.g. 1. talking, educational robot; 2. Ally, most advanced robot, AI; 3. Ally, see, hear, speak, teach maths, science; 4. robot, runs, batteries. - Play the recording and tell Ss to listen and pay attention to the keywords as well as paraphrases of these keywords, e.g. 1. Nam says 'I'd like to know more about the home robots at the New Tech Centre.' so the statement is false. - Have Ss compare their answers in pairs or groups. - Check answers as a class and confirm the correct ones. Invite individual Ss to provide evidence from the conversation for each answer and correct the false ones. - In weaker classes, play the recording again, pausing at the places where they can find the information.	- Students make predictions before listening. - Listen and check the answer. - Compare the answers in pairs and with the whole class.	*Answer key:* 1. F 2. T 3. T 4. F
Task 3: Listen to the second part of the conversation and complete each gap in the diagram with no more than TWO words. (10 mins)		
- Have Ss look at the diagram and read each section. Check understanding. - Ask Ss to underline the keywords, and guess the type of information to fill in each blank, e.g. 1. what is at the back of Ally' head; 2. what to choose after pressing the Start button; 3. what should users say to ask questions; 4. what to open. Remind Ss that they may hear paraphrases of the statements on the recording so they should listen for synonyms or phrases with similar meanings. - In stronger classes, ask Ss to complete the sentences based on what they remember from the first listening. - Play the recording and have Ss fill in the missing words. Remind them not to exceed the word limit (no more than two words in each blank). - Have Ss compare their answers in pairs or groups. - Check answers as a class. Invite individual Ss to read out the word or phrase in each blank.	- Students read the questions and underline the key words and identify the part of speech to fill in each blank. - Students fill in the missing words with no more than TWO words for each blank.	*Answer key:* 1. serial number 2. function 3. Hey Ally 4. app

- In weaker classes, have Ss listen again, pausing at the places where Ss can find the information.		

e. Assessment
- Teacher's observation on Ss' performance.
- Teacher's feedback and peers' feedback.

4. ACTIVITY 3: POST-LISTENING (8 mins)

a. Objectives:

- To give Ss the opportunity to use the ideas and language in the listening to give opinions and reasons.

b. Content:

- Task 4: Work in pairs. Discuss the following questions.

Do you want to have the same type of robot? Why/Why not? (p.82)

c. Expected outcomes:

- Students can use the language and ideas from the unit to talk about robots.

d. Organisation

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Task 4: Work in pairs. Discuss the question.		
- Ask Ss to work in pairs and discuss the question. Walk round the class and offer help. - Call on Ss from different groups to share their ideas with the class.	- Students work in pairs and discuss. - Students share their ideas to the whole class.	*Suggested answer:* *I would like to have a robot like Ally at home because it can become my friend and help me with my studies. It can teach me maths, science, and language skills. I also like Ally because it is an eco-friendly robot and runs on renewable energy.* *I want to have a home robot, but I want it to have more functions than Ally has. I think a home robot should be able to clean the house, cook meals, and even go to the supermarket to buy food.*

e. Assessment
- Teacher's observation on Ss' performance.
- Teacher's feedback and peers' feedback.

5. CONSOLIDATION (3 mins)

a. Wrap-up
- Summarise the main points of the lesson.

b. Homework
- Do exercises in the workbook.
- Prepare for the next lesson – Writing.

Board Plan

Unit 6: Artificial intelligence
Lesson 5: Listening

*Warm-up
 Video watching

- Task 1: Discuss the questions.
- Vocabulary
1. command (n)
2. monitor (n)
3. station (n)
4. function (n)
- Task 2: True or false.
- Task 3: Listen and complete the diagram.
- Task 4: Discussion.

*Homework

UNIT 1: ARTIFICIAL INTELLIGENCE
Lesson 6: Writing – An essay about the advantages and disadvantages of home robots

I. OBJECTIVES
By the end of this lesson, Ss will be able to:

1. Knowledge
- Write an essay discussing the advantages and disadvantages of home robots.

2. Competences
- Develop writing skills, in terms of vocabulary, grammar, coherence and cohesion.
- Be collaborative and supportive in pair work and teamwork.

3. Personal qualities
- Be aware of the advantages of AI applications in education.

II. MATERIALS
- Grade 12 textbook, Unit 6, Writing
- Computer connected to the Internet
- Projector / TV
- *hoclieu.vn*

Assumption

Anticipated difficulties	Solutions
Students may have underdeveloped listening, writing and co-operating skills.	- Play the recording many times if necessary. - Encourage students to work in pairs, in groups so that they can help each other. - Provide feedback and help if necessary.

III. PROCEDURES
1. WARM-UP (5 mins)
a. Objectives:
- To create an active atmosphere in the class before the lesson;
- To lead into the new lesson.

b. Content:
- Video watching

c. Expected outcomes:
- Students can have an overview about the topic of the lesson's topic.

d. Organisation

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Video watching - Teacher divides the class into 2 groups.	- Students work in groups to do the activity.	*Link:* https://www.youtube.com/watch?v=sj1t3msy8dc

| - Before playing the video, teacher asks Ss to watch carefully and try to remember as many details as possible. Ss can take notes if they want.
- Teacher shows the question, Ss write down all the answers, as many as possible.
- The team with more correct answers will be the winner.
- Teacher leads in the lesson. | - Students raise their hands to answer the questions. | *Questions:*
What can the robot in the video do?
Suggested answers:
- listen and follow the user's commands;
- make video calls;
- remind people what to do everyday;
- self-charge automatically;
- detect unusual situations,
- etc… |

e. Assessment

- Teacher observes and gives feedback.

2. ACTIVITY 1: PRE-WRITING (9 mins)

a. Objectives:

- To help Ss generate ideas for their writing.

b. Content:

- Task 1: Work in pairs. Read the notes and decide which are advantages (+) and which are disadvantages (–) of home robots. Then add the sentences (A-D) in the box to support each advantage or disadvantage. (p.83)

c. Expected outcomes:

- Students can select the appropriate information and have ideas to write about the advantages and disadvantages of home robots in the next part.

d. Organisation

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Task 1: Work in pairs. Read the notes and decide which are advantages (+) and which are disadvantages (–) of home robots. Then add the sentences (A-D) in the box to support each advantage or disadvantage.		
- In stronger classes, put Ss in pairs and have them discuss the advantages and disadvantages of having a home robot. Remind them of Ally from the Listening section and the things it can do. - In weaker classes, recap the advantages of having Ally as a home robot. Elicit some disadvantages by asking questions such as *What will happen if the robot gets broken? In case of an emergency, do you think a robot will be able to dial the emergency phone number? What will happen if we become completely dependent on robots?* - Ask Ss to read the statements and check if their ideas are included. In weaker classes, check comprehension and explain that each advantage or disadvantage is supported by	- Students work in pairs and discuss the advantages and disadvantages of having a home robot. - Students look at the tables and check if their ideas are included. - Students complete the notes and decide on the advantages and disadvantages of home robots.	*Answer key:* Advantages: 1 - B; 4 - C Disadvantages: 2 - A; 3 - D

two reasons or examples, but only one is given. The other one is in the word box. - Give Ss a few minutes to decide which are advantages and which are disadvantages, and add the additional reasons to the correct statements. - Call on some pairs to share their answers. - Confirm the correct answers as a class.		

e. Assessment

- Teacher checks students' answers as a whole class.

3. ACTIVITY 2: WHILE-WRITING (18 mins)

a. Objectives:

- To help Ss practise writing an essay about the advantages and disadvantages of home robots.

b. Content:

- Task 3: Write an essay (180–200 words) about the advantages and disadvantages of home robots, using the ideas in task 1 and the suggested outline below. (p.83)

c. Expected outcomes:

- Students can write an essay about the advantages and disadvantages of home robots.

d. Organisation

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Task 2: Write an essay (180–200 words) about the advantages and disadvantages of home robots, using the ideas in task 1 and the suggested outline below.		
- Ask Ss to study the outline and the useful expressions and check understanding. - Review the structure of an essay. Write its parts on the board, but jumbled up, and ask Ss to put them in the correct order. Have Ss refer to the Writing section in Unit 2 to check their answers if possible. - Put Ss into groups and have them brainstorm ideas for their essays. Encourage Ss to use the ideas in 1 and think of supporting ideas and examples. - Walk round the class to give further support if needed. - When Ss finish writing, give them time to check their essays. - Give Ss a time limit. In weaker classes, put Ss in pairs or groups	- Students brainstorm for the ideas and the language necessary for writing - Students write the first draft individually using the ideas in task 1.	*Suggested answer:* *AI technologies have given us many amazing opportunities. One of them is using smart robots to perform different tasks at home. People are beginning to use home robots, but we need to consider both the advantages and disadvantages that they can bring.* *Using home robots has several advantages. First, they can clean our houses, do the laundry and water the plants. They will never complain about doing all the repetitive and boring tasks. Robots can also help us spend more quality time with our families. We will have more time for leisure activities and family bonding. Second, home robots can provide information and entertainment. They are programmed to answer questions*

to help each other. Walk around the class to provide help when necessary.		*about many topics. They can also keep us entertained by performing music or playing games with us.* *However, there are also disadvantages of having a home robot. First, all the robots and other intelligent machines are designed by human beings. They need to be pre-programmed by engineers and can only follow a set of instructions. If a robot breaks down, it will be expensive to repair. In addition, we may start relying on home robots too much. We may become lazy and use our brains less and less. This way we may lose our ability to think critically.* *In conclusion, home robots are designed to make our lives easier and happier. However, we should not become too dependent on them if we don't want to lose important life skills.*

e. Assessment

- Teacher gives corrections and feedback.

4. ACTIVITY 3: POST-WRITING (12 mins)

a. Objectives:

- To do a cross-check and final check on students' writing.

b. Content:

- Students exchange their work for cross-checking.

c. Expected outcomes:

- Students can evaluate others' work as well as improve their own pieces of writing.

d. Organisation

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Cross-checking - Teacher has the pairs swap and gives feedback on each other's writing. Teacher shows a writing rubric to help Ss do the peer review. - Ss do the task as required. - After peer review, Ss give the writing back to the owner and discuss how to improve it. - Teacher then chooses one piece of writing and gives feedback on it as a model.	- Students swap their piece of writing with their partners and give peer review.	*Writing rubric* 1. Organization: …/10 2. Legibility: …/10 3. Ideas: …/10 4. Word choice: …/10 5. Grammar usage and mechanics: …/10 TOTAL: …/50

- Teacher chooses some useful or excellent words/ phrases/ expressions/ word choices Ss have used to give suggestions to other Ss. - Teacher chooses some typical errors and corrects as a whole class without nominating the Ss' names.		

e. Assessment

- Teacher's observation on Ss' performance, provides help if necessary.
- Teacher's feedback and peers' feedback.

4. CONSOLIDATION (2 mins)

a. Wrap-up

- Summarise the main points of the lesson.

b. Homework

- Rewrite the essay in the notebooks.
- Prepare for Lesson 7 – Communication & Culture.

Board Plan

<div>

Date of teaching
Unit 6: Artificial Intelligence
Lesson 6: Writing

*Warm-up
Watch a video

- Task 1: Decide advantages or disadvantages. Then complete the notes.
- Task 2: Write an essay about the advantages and disadvantages of home robots.
- Peer review

*Homework

</div>

UNIT 6: ARTIFICIAL INTELLIGENCE
Lesson 7: Communication and Culture / CLIL

I. OBJECTIVES
By the end of this lesson, Ss will be able to:
1. Knowledge
- Expand vocabulary with the topic of the unit;
- Gain knowledge about the evolution of robots;
- Review expressions for getting attention and interrupting.
2. Competences
- Develop communication skills and creativity;
- Develop presentation skill;
- Be collaborative and supportive in pair work and teamwork.
3. Personal qualities
- Be aware of the advantages of AI applications in education.

II. MATERIALS
- Grade 12 textbook, Unit 6, Communication and Culture / CLIL
- Computer connected to the Internet
- Projector / TV
- *hoclieu.vn*

Language analysis

Form	Pronunciation	Meaning	Vietnamese equivalent
1. evolution (n)	/ˌiːvəˈluːʃn/	the slow steady development of something	tiến hóa
2. stimulus (n)	/ˈstɪmjələs/	something that helps somebody/ something to develop better or more quickly	chất xúc tác
3. provoke (v)	/prəˈvəʊk/	to cause a particular reaction or have a particular effect	kích thích
4. slope (n)	/sləʊp/	a surface or piece of land that slopes (= is higher at one end than the other)	sườn núi
5. imitate (v)	/ˈɪmɪteɪt/	to copy somebody/something	bắt chước

Assumption

Anticipated difficulties	Solutions
Students are reluctant to work in groups.	- Encourage students to work in pairs and in groups so that they can help each other. - Provide feedback and help if necessary.

	- Explain expectations for each task in detail.
	- Continue to explain task expectations in small chunks (before every activity).
Students may lack vocabulary to deliver a speech.	- Provide vocabulary and useful language before assigning tasks
	- Encourage students to work in groups so that they can help each other.

III. PROCEDURES

1. WARM-UP (5 mins)

a. Objectives:

- To stir up the atmosphere and activate students' knowledge on the topic;
- To enhance students' skills of cooperating with teammates.

b. Content:

- Video watching

c. Expected outcomes:

- Students can get knowledge about a modern robot in the world.

d. Organisation

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Video watching - Before playing the video, teacher asks Ss to watch carefully and try to remember as many details as possible. Ss can take notes if they want. - Teacher shows the question, Ss raise their hands to grab the chance to answer. - Teacher leads in the lesson.	- Students work in groups to do the activity. - Students raise their hands to answer the questions.	*Link:* https://www.youtube.com/watch?v=Q1d5aiBFNpM *Questions:* What's your impression on Ameca – the robot?

e. Assessment

- Teacher observes the groups and gives feedback.

2. ACTIVITY 1: EVERYDAY ENGLISH (20 mins)

a. Objectives:

- To provide a model conversation in which speakers get attention and interrupt;
- To review how to get attention and interrupt;
- To help Ss practise getting attention and interrupting.

b. Content:

- Task 1: Listen and complete the conversations with the expressions in the box. Then practise them in pairs (p.84)
- Task 2: Work in pairs. Use the models in Task 1 to make similar conversations for these situations. One of you is A, the other is B. Use the expressions below to help you. (p.84)

c. Expected outcomes:

- Students can use appropriate language to get attention and interrupt in certain situations.

d. Organisation

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Task 1: Listen and complete the conversations with the expressions in the box. Then practise them in pairs. (6 mins)		
- Ask Ss to read through the two incomplete conversations. Check comprehension by asking questions, e.g. *Who are the speakers? What are they talking about? What is the difference between conversation 1 and conversation 2?* - Give Ss a few minutes to read the expressions in the box and check understanding. - In stronger classes, encourage Ss to fill in the gaps based on context clues. - Have Ss listen and complete the conversation with the words from the box. - Check answers by asking two Ss to read out the conversations. - Have Ss underline expressions used to get attention (*Hey, May I have your attention*) and interrupt (*Do you mind, I'm sorry for interrupting*) - Put Ss in pairs and have them practise the conversation. - Invite some pairs to role play the conversation in front of the class.	- Students listen to the recording. - Students complete the conversation with words in the box. - Students practise the conversation in pairs.	*Answer key:* 1. C 2. B 3. D 4. A
Useful expressions (7 mins)		
- Teacher gives students a list of expressions which are mixed together. Ss have to classify them into 2 groups: get attention and interrupt. - Teacher asks Ss to classify the expressions into two groups. - Check as a class. - T asks if Ss can add some more expressions.	- Ss work in groups to do the task. - Ss take notes into their notebooks.	*** Getting attention** • May I have your attention, please? • Could I ask you a question? • Can I have a few seconds/a moment of your time? • Look!/Listen!/Watch! • Excuse me! • Sorry to bother you. • Hey! *** Interrupting** • I'm sorry for interrupting/to interrupt, but I don't quite understand ... • Sorry for the interruption, but could you(repeat) ... • This wll only take a minute. • Would you mind (telling me) ...

		• I apologise for the interruption, but I have an important question about ... • Pardon me/Excuse me, I have … • Hold on! • Just a second

Task 2: Work in pairs. Use the models in Task 1 to make similar conversations for these situations. One of you is A, the other is B. Use the expressions below to help you. (6 mins)

- Ask Ss to read through the situations and check understanding. Ask them if they have been in similar situations, e.g. if they go to a museum and robot exhibition, see a friend and want to get his/her attention, how they can interrupt a speaker in a talk on AI. - Have Ss work in pairs. In weaker classes, underline words and phrases in the model conversation that Ss can replace with information from the new situations. You can also write some prompts on the board. - Go through the Useful expressions in the box and remind Ss to use them in their conversations. - Give Ss a few minutes to plan their conversations. Have them write down some prompts to help them, e.g. *how they are going to get the attention of a friend, how they are going to interrupt a speaker to ask a question…* - Walk around the class and provide help if needed. - Call on some groups to role play their conversations in front of the class. Praise for good effort, appropriate use of the expressions for getting attention and interrupting, clear pronunciation and fluent delivery.	- Make a plan for the conversation. - Practise the role-play conversation, based on the two situations. - Swap the role and continue practising. - Perform in front of class.	**Suggested answer:** 1. A: Hey, Long. B: Oh, hi, Mai. I didn't expect to see you here. It's a great exhibition of 21st-century robots, isn't it? A: Yes, it is. Oh look! There's also a VR tour of the robots of the future. B: Sounds exciting! Shall we do the tour together? A: Yes, good idea. 2. A: … So I have talked about the use of AI in education. Now, let's move on to applications of AI in our home. B: Sorry for interrupting you, Dr Peterson, but before you start the new topic, could I ask a question? A: No problem. Go ahead. B: Thank you. Would you mind telling us more about the challenges of using AI chatbots in the classroom? A: That's a good question. First, chatbots can distract students in the classroom. Second, they can make you dependent on technology. Finally, they may provide wrong answers if there are errors or bugs in the software.

e. Assessment
- Teacher checks students' answers as a whole class.

3. ACTIVITY 2: CLIL (15 mins)

a. Objectives:

- To help Ss learn about the evolution of robots;

- To help Ss relate what they have learnt about robots to the situation in Viet Nam.

b. Content:

- Task 1. Read the text and complete the timeline showing the evolution of robots (p.85)

- Task 2. Work in groups. Discuss the questions. (p.85)

c. Expected outcomes:

- Students understand the meaning of words, memorise the information, and relate what they have learnt about AI robots in the world to the context of their own country.

d. Organisation

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Task 1: Read the text and complete the timeline showing the evolution of robots. (10 mins)		
- Ask Ss some questions to find out what they already know about the topic, e.g. *Have you ever had/met a robot? When did the first robot appear? How have robots changed ?* - Ask Ss what they want to know about the topic. Write their questions on the board, e.g. *What type of robots were first introduced? In which field are robots being used? Can you list some examples of robots?* - Put Ss into pairs. Ask them to read the text and complete the timeline illustrating the evolution of robots with suitable numbers or words. Walk round the class and offer help, explaining unfamiliar words or answering questions. - Check answers as a class calling on pairs to write their answers on the board. Have Ss provide evidence from the text for each answer. - Go back to the questions on the board, i.e., the things Ss wanted to know about the topic. Ask which of the questions they can answer now and cross them out. Assign the rest for homework.	- Students answer questions to find out what they already know about the topic. - Students work in pairs and read the text and complete the timeline illustrating the evolution of robots with suitable numbers or words.	*Answers:* 1. 1959 2. Kismet 3. 2005 4. visual recognition
Task 2: Work in groups. Discuss the questions. (5 mins)		
- Ask Ss to work in groups to discuss the two questions. - In weaker classes, ask questions to brainstorm ideas as a class, e.g. *Is AI being used in Viet Nam? What are they?*	- Students work in groups to discuss the question. - Students share their ideas in front of class.	*Suggested answers:* Artificial intelligence (AI) and machine learning have become very popular in Viet Nam. For example, AI apps such as Google search,

- To answer the first question, encourage Ss to think of some fields which are applying AI, e.g: education *(Google search, ChatGPT, Grammarly), workplace (facial recognition, Auto-answer box), home (robot cleaner, facial recognition), entertainment (VR).* Then they come up with some ideas about how robots and AI will be in the future (*AI will replace tedious or dangerous tasks, AI will treat, and largely eliminate, neurological disorders like Alzheimer's, Parkinson's, most birth defects, and spinal cord injuries as well as blindness and deafness, robots will be controlled by our minds*) - Invite some groups to present a summary of their discussion to the class.		ChatGPT, and Grammarly, are used in education, while many facial recognition and auto-answer apps are used in the workplace. Facial and speech recognition apps are also used at home. Robot cleaners are becoming popular as well. Virtual reality is also used in the entertainment industry. In the future, AI will be used in healthcare a lot more. It will also help diagnose and treat neurological disorders like Alzheimer's and Parkinson's. It will also be used to detect birth defects in early pregnancy. Moreover, AI will be able to decode brain activities and change it to continuous text, which means it can translate for people who struggle to speak. There will be a lot more advanced robots in all industries and they will take up most of the manual jobs. In education, robots will be capable of teaching all subjects.

e. Assessment
- Teacher corrects the students as a whole class.

5. CONSOLIDATION (3 mins)
a. Wrap-up
- T asks Ss to talk about what they have learnt in the lesson.
b. Homework
- Do exercises in the workbook.
- Prepare for Lesson 8 – Looking back and project.

Board Plan

Unit 6: Artificial Intelligence
Lesson 7. Communication and Culture / CLIL

*Warm-up
 Watch a video

*Communication
Task 1: Listen and complete the conversations.
Task 2: Make similar conversations.

*CLIL
Task 1: Read the text and complete the timeline showing the evolution of robots.
Task 2: Discussion

* Homework

UNIT 6: ARTIFICIAL INTELLIGENCE
Lesson 8: Looking back and project

I. OBJECTIVES
By the end of this lesson, Ss will be able to:

1. Knowledge

- Review the vocabulary and grammar of Unit 6;
- Apply what they have learnt (vocabulary and grammar) into practice through a project;
- Propose a way to use AI in daily lives and give a group presentation about it.

2. Core competence

- Develop communication skills and creativity;
- Develop presentation skills;
- Develop critical thinking skills;
- Be collaborative and supportive in pair work and team work;
- Actively join in class activities.

3. Personal qualities

- Be proud and respectful of famous people in Viet Nam and in the world

II. MATERIALS
- Grade 12 textbook, Unit 6, Looking back and project
- Computer connected to the Internet
- Projector / TV/ pictures and cards
- *hoclieu.vn*

Assumption

Anticipated difficulties	Solutions
Students may have underdeveloped speaking, writing and co-operating skills when doing the project.	- Encourage students to work in pairs and in groups so that they can help each other. - Provide feedback and help if necessary.
Some students will excessively talk in the class.	- Explain expectations for each task in detail. - Continue to explain task expectations in small chunks (before every activity).

III. PROCEDURES
1. WARM-UP (5 mins)

a. Objectives:

- To stir up the atmosphere and activate students' knowledge on the topic;
- To enhance students' skills of cooperating with teammates.

b. Content:

- Game: Lucky number

c. Expected outcomes:

- Students can recall the vocabulary they have learnt in Unit 1.

d. Organisation

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Game: Lucky number - Ss work in 2 teams. - There are 7 numbers, 1 of which are lucky ones. - If Ss choose a lucky number, they get one point without answering the question. - If they choose the other numbers, Ss have to rearrange the letters in the word to make a correct one. (scramble words) - One point for a correct answer. - The group with the most points is the winner.	- Students join the game and guess the words.	*Suggested words:* 1. Chatbots 2. Personalise 3. Portfolio 4. Virtual 5. Platform 6. Robotic

e. Assessment

- Teacher observes the groups and gives feedback.

2. ACTIVITY 1: LOOKING BACK (12 mins)

a. Objectives:

- To help Ss review the pronunciation of the homophones.

- To help Ss revise words and phrases they have learnt in this unit.

- To help Ss review the Active and Passive Causatives.

b. Content:

- Pronunciation: Listen and underline the homophone of the word in bold in each sentence. Then practise saying the sentences in pairs. (p.86)

- Vocabulary: Complete the sentences using the correct forms of the words in the box (p.86)

- Grammar: Choose the option A, B, C, or Dthat is closest in meaning to each of the given sentences. (p.86)

c. Expected outcomes:

- Students can use the knowledge they have learnt in this unit to complete the tasks successfully.

d. Organisation

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
Pronunciation: Listen and underline the homophone of the word in bold in each sentence. Then practise saying the sentences in pairs. (4 mins)		
- Tell Ss to listen and underline the homophone of the bold word in each sentence, then compare their answers in pairs. - Play the recording once for Ss to check their answers. - Have Ss practise saying the sentences out loud in pairs, paying attention to the homophones.	- Listen and underline the homophone of the bold word in each sentence, then compare their answers in pairs. - Practise saying the sentences out loud in pairs.	*Answer key:* 1. People are not <u>allowed</u> to talk **aloud** in the library. 2. Students felt very **bored** when their teacher kept writing on the <u>board</u>. 3. **Where** can I buy some new clothes to <u>wear</u> to the party? 4. Robots don't **know** how to say '<u>No</u>'.
Vocabulary: Complete the sentences using the correct forms of the words in the box (4 mins)		
- Ask Ss to read each sentence and check comprehension.	- Read each sentence.	*Answer key:* 1. applications

- Tell Ss to study the context carefully and decide on the suitable word to complete each sentence. - Have Ss check their answers in pairs / groups. - Check answers as a class by asking individual Ss to read the sentences.	- Study the context carefully and decide on the suitable word to complete each sentence. - Check answers in pairs / groups.	2. artificial intelligence 3. activate 4. virtual

Grammar: Choose the option A, B, C, or D that is closest in meaning to each of the given sentences. (4 mins)

- Ask Ss to read sentences and choose the correct answer for each sentence. - Have Ss check their answers in pairs / groups. - Check answers by asking individual Ss to read each sentence and elicit the type of causative (active or passive) in each blank.	- Read sentences and choose the correct answer for each sentence. - Check answers in pairs / groups. - Explain the answers.	*Answer key:* 1. A 2. C 3. D 4. B

e. Assessment

- Teacher obverses Ss's work and gives feedback.

3. ACTIVITY 2: PROJECT (28 mins)

a. Objectives:

- To provide an opportunity for Ss to develop their research and collaboration skills, and to practise giving a presentation.

b. Content:

- Presentation: AI in our daily lives

c. Expected outcomes:

- Students practice giving a presentation.

d. Organisation

TEACHER'S ACTIVITIES	STUDENTS' ACTIVITIES	CONTENTS
- As Ss have prepared for the project throughout the unit, the focus of this lesson should be on the final product, which is a poster/ leaflet. - Have Ss work in their groups. Give them a few minutes to get ready for their poster/ leaflet presentation. Ask them to decide who is going to stand by the group poster/ display their leaflet, and answer questions about it, and what questions the rest of the group can ask as they walk around the classroom and view other groups' posters/ leaflets. - Give Ss a checklist for peer and self-assessment. Explain that they will have to tick appropriate items while studying their classmates' posters and asking questions about them. They should also write comments if they have any. The group	- All groups exhibit their posters and make presentations. - When one group makes a presentation, others listen and complete the evaluation sheet.	*Students' presentations*

representatives should also complete their self-assessment checklist. - If necessary, go through the assessment criteria to make sure Ss are familiar with them. - Have groups display their posters/ leaflets. Ask the group representative to stand next to their posters/ display their leaflet while the rest of the class walk around, study the posters/ leaflet and ask questions about them. In stronger classes, you can have group members take turns to stand by the poster/leaflet and answer questions. - Give Ss enough time to study all posters/leaflets and complete the checklists. Then have them sit down and vote for the best poster/ leaflet.		

e. Assessment
- Teacher gives comments and feedback to all presentations.

4. CONSOLIDATION (3 mins)
a. Wrap-up
- T asks Ss to talk about what they have learnt in the lesson.
b. Homework
- Do exercises in the workbook.
- Prepare for Unit 7.

Board Plan

<table>
<tr><td>
<div align="center">Date of teaching
Unit 6: Artificial Intelligence
Lesson 8: Looking back and project</div>

*Warm-up

* Looking back
- Pronunciation
- Vocabulary
- Language

* Project: AI in our daily lives

*Homework
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