A Corpus-Based Innovative Approach to Vocabulary Teaching

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Topic: Environment

Class Duration: 70 minutes

Target vocabulary Items: "Preserve" vs. "Conserve"

Level of students: Secondary (Junior form 2 or 3)

Corpus used: COCA

Learning objectives:

By the end of the lesson, students will be able to:

- 1. Distinguish the difference in the usage between the verbs "preserve" and "conserve";
- 2. Write a short article about air pollution or water pollution using the verbs "preserve" and "conserve";
- 3. Use the corpus and AI tools to support self-directed and inductive learning.

Context:

To celebrate "World Earth Day", students are going to participate in lots of learning activities. For example, they need to distinguish the words "preserve" and "conserve" and use them to describe what they can do to protect the environment.

Lesson progression:

Stage 1: Bringing in the topic and introducing the new vocabulary (10 minutes)

The teacher introduces today's lesson topic, which is "The World Earth Day", to the students. Then, the teacher assigns an exercise and asks the students to brainstorm the things that need to be protected on Earth.

Next, the teacher introduces new vocabulary words, "conserve" and "preserve". The students are then divided into groups to discuss and categorize the nouns or noun phrases they came up with in the previous task. This activity aims to help them understand the differences between these two verbs.

Following that, the teacher demonstrates how to use ChatGPT for instant feedback on sorting nouns into collocations with "conserve" or "preserve". The chatbot can promptly correct any errors in the students' answers, enhancing their comprehension and highlighting areas where they need to make improvements. This approach encourages learning by identifying knowledge gaps.

Stage 2: Corpus exploration and inductive discovery by students (25 minutes)

Task 1: Before doing hands-on corpus research, students will be divided into a few groups and learn the steps to use COCA. Then, the teacher gives out papers printed with the concordance lines and students need to find common features in the authentic examples of "preserve" and "conserve".

To facilitate understanding, the teacher can ask students to read the sentence and do some peer work.

Notably, effective peer-to-peer learning requires balanced study groups. To achieve this, the teacher can organize them into groups with similar proficiency levels.

Next, students will be asked to underlie the object that follows the two verbs, and they can discuss with their group members to summarize the environmental contexts in which these verbs are commonly used. By doing so, students can cultivate their problem-solving skills.

Task 2: To enhance comprehension, the teacher guides students in using an AI tool to create images depicting the usage scenarios of "preserve" and "conserve".

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Task 3: Finally, after the teacher provides a clear summary of the usage contexts for

the two words explicitly, students are given time to explore COCA by themselves. And

they will engage in a game to assess their understanding of the difference between the

two words.

Task 4: The teacher is supposed to assign each group a different genre, such as

newspapers, magazines, academics, and blogs. Students use COCA to further develop

the usage awareness of "preserve" and "conserve" related to environmental topics,

discussing and summarizing the features within their respective groups. The teacher

will explain how to select a single genre to observe, for example, focusing on

"conserve" in an academic context.

Students will carefully read the context within their chosen genre, and they are

encouraged to compare and contrast their findings with other groups to deepen their

understanding.

The teacher can randomly call upon several groups to share their observation with

the whole class, providing feedback to correct any misunderstandings that they may

have.

Stage 3: Group discussion and synthesis (15 minutes)

The teacher will divide the students into small groups of 4-5 members.

Each group will select a topic from the provided options related to the usages of

'preservation' and 'conservation', covering areas such as Renewable Energy and Water

Pollution.

The teacher will provide each group with a mind map, which includes examples,

related vocabulary, resources, and reasons related to 'preservation' and 'conservation'.

The teacher will explain that the mind map will be used to organize their findings

for the subsequent task of creative writing. Students will be encouraged to complete the

whole mind map, drawing inspiration from the given examples.

Then, students engage in a discussion, using the corpus to find more examples and

applications of 'preservation' and 'conservation'.

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The teacher will encourage students to fill the mind map with examples from the corpus, relevant vocabulary, and their own thoughts.

Throughout the activity, the teacher will monitor the groups, offering guidance and answering any questions that arise.

After students finish their mind maps, one member from each group will be asked to present their mind map and the group's findings.

After each presentation, the teacher and other students will provide feedback, mainly focusing on the accuracy of the content.

Stage 4: Creative application (15 minutes)

After receiving guidance from the teacher, students will create a Synthesis Poster that encompasses various environmental-related words. In stage 4, students will use their acquired knowledge to finish a group project. The teacher will provide instructions on using "preserve", "conserve", and other words from the Synthesis Poster to describe pollution and provide measures to protect the Earth.

During the task, the teacher can give students some hints about what they have learned and what is suitable for students to use in this writing task. Also, the teacher should encourage students to cooperate with each other. Students should be informed that there will be a presentation after finishing the writing task.

Stage 5: Presentation and feedback (5 minutes)

The teacher will divide the students into small groups of 4-5 members.

Within each group, students will be asked to exchange their written work and engage in peer check. Students will be encouraged to discuss the usage of 'conserve' and 'preserve', and correct each other if necessary. This process allows students to learn from each other, gaining insights into different perspectives on Earth protection, as well as improving their expression and vocabulary use. In this task, the teacher will move around, monitor the groups, and provide necessary guidance to some students.

After 3 minutes of checking and discussion, 1 to 3 students will be given the opportunity to present their own written work in class. They will be guided to create

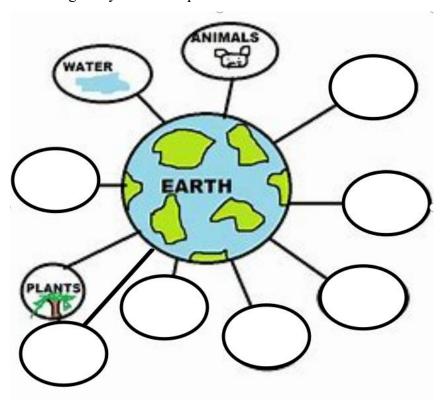
and share animated motion pictures based on their written sentences using an AI-powered tool.

The teacher will offer positive feedback to students and explain the presented sentences in detail, focusing on the usage of 'conserve' and 'preserve', collocations, vocabulary, etc.

STAGE 1: Bringing in the topic and introducing the new vocabulary(10 minutes)

Part 1: Brainstorming

The World Earth Day is coming. As one of the global citizens, all of us need to take action to protect our environment. In this section, you are required to come up with something that you need to protect on the earth and fill in the blanks.



Part 2: Group discussion (Pair work)

Below are two verbs, "conserve" and "preserve" and both share the common meaning

of protecting and maintaining something. Please input the nouns or noun phrases you wrote during the first task into the correct columns to match the verbs.

conserve	preserve

After students finish the matching task, the teacher facilitates a peer-check activity. Pairs of students swap their answer sheets with other pairs and check collocations that may sound problematic. To further support this activity, the teacher demonstrates how to use **ChatGPT** for instant feedback on sorting nouns into collocations with "conserve or "preserve". Students can input ChatGPT the following sample prompts:

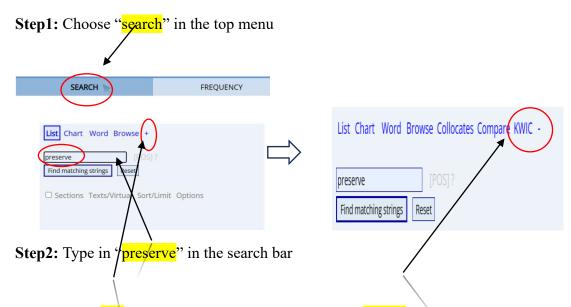
- Should "forest" be categorized under "preserve" in the collocation of "preserve + noun/noun phrases"?
- Is "energy efficiency" appropriately categorized under the "conserve + noun/noun phrases" collocation?
- Does the noun phrase "historical landmarks" fit better with "conserve" or "preserve" in terms of collocation?
- In the collocation of "conserve + noun/noun phrases", does "strawberry jam" fit correctly?

By utilizing the chatbot, students can receive instant feedback to correct any errors and thus reveal knowledge gaps.

Stage 2: Corpus exploration and inductive discovery by students (25 minutes)

Task1: looking for a suitable context to use "preserve" and "conserve" with the authentic examples (Group work)

(The teacher teaches the students how to use COCA to find authentic sample sentences containing "preserve" and "conserve", the steps are as follows:



Step3: Click "+" to locate the KWIC button, and the "KWIC" option will then appear



Step4: click "-" between the "L" and "R" and COCA automatically sorts the 1-3 words to the left/right for you

Step5: click "Keyword in Context" to search

(After demonstrating the research results on screen, the teacher gives out papers printed with selected sentences from COCA.)

<u>Form groups of 3-4.</u> Have a look at the concordance lines below for both "preserve" and "conserve" from COCA. Then, <u>compare</u> the usage environmental context of the two verbs.

(Concordance lines of 'preserve')



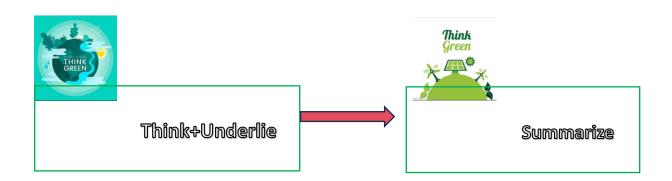
Teacher tips:

The teacher leads students to read these sentences and helps them understand the meanings.

Q1: Please <u>circle the object after the word "preserve"</u> in the sentences. The first example has been done for you.



Teacher tips: After students finish, they can check and discuss with their group members.



Summary:

The scope of application of "preserve" is <u>Large/Limited</u> (Circle one) (suggested answer: limited)

Meaning (1): keep something as it is, especially to prevent it from decaying or being damaged or destroyed.

Meaning (2): to treat food in a particular way so that it can be kept for a long time without going bad.

Special Meaning (3): a food made from **fruit or vegetables** boiled with sugar and water until it becomes a **firm sauce**.

In the following aspects, "preserve" applies to: <u>Natural resources/ Cultural heritage/</u>
<u>Preservation method/ Environmental sustainability /Environmental Protection /Jam</u>
(You can circle more than one answer)

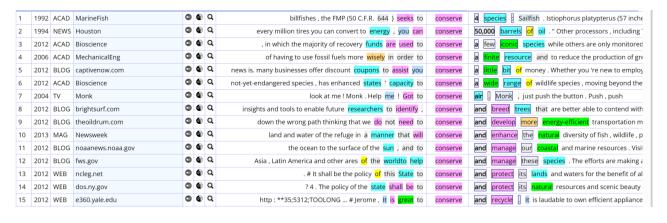
(Suggested answer: Cultural heritage, Environmental protection, and Jam.)

Teaching suggestions:

(The teacher orally explain the requirements of the task to students.)

- 1) read aloud the sentence that contains the word "preserve";
- 2) **underlie** the object that can show the collocation of the words;
- 3) **summarize** the usage scenario of the word;

(Concordance lines of 'conserve')



Teacher tips: The teacher can invite some students to lead others to read these sentences, let students help students, teachers can monitor them, and give appropriate support.

Q2: Please <u>circle the object (after the word "conserve")</u> in the sentences. The first example has been done for you.



Teacher tips: After students finish, they can check other groups' answers and discuss them with them.

Summary:

The scope of Application of "Conserve": Large / Limited (Circle one) (Suggested answer: Large)

Meaning (1): To use resources wisely and avoid waste, ensuring sustainability for future generations.

Meaning (2): Refer to the sustainable management and use of natural resources in an environmental context, to prevent depletion.

Meaning (3): Broadly relates to **saving or sparing** something from being used up or exhausted.

In the following aspects, "conserve" applies to:

Natural resources/Environmental sustainability/Energy Efficiency/Urban Development/Historical Preservation (You can circle more than one answer) (Suggested answer: Natural resources, Environmental sustainability, Energy efficiency)

Teaching suggestions: In this section, lead students to self-learning

- Follow some students and read aloud the sentence that contains the word "conserve"
- 2) underlie the object that can show the collocation of the words
- 3) summarize the usage scenario of the word

Teacher tips: Upon understanding the rules for using "conserve" and "preserve" in various scenarios, students can better assess the correctness of their collocations in Stage 1.

Task 2: Visualizing the usage scenarios of "preserve" and "conserve"

Following the summary of the rules for using "preserve" and "conserve" in different scenarios, the teacher guides students in using AI-generated images to depict those scenarios, aiming to aid students in visualizing and differentiating the applications of "preserve" and "conserve" in distinct contexts. For stronger students, they can generate their own prompts. Teacher prompts can be provided for relatively weak students or

upon request.

For this activity, students can use **The Deep Dream Generator** (https://deepdreamgenerator.com/) to produce AI-generated images for "preserve" based on the following sample prompts:

- Generate an image showing relics in a museum setting to illustrate "preserve cultural heritage".
- Create an image depicting a wildlife sanctuary for "preserve environmental protection".
- Produce an image of assorted jars of homemade jam for "preserve jam".



(Screen captures of AI-generated images for the usage scenarios of "preserve")

Similarly, students can use the following sample prompts to generate images for "conserve":

- Create an image of a thriving forest with a river and wildlife, illustrating the concept of "conserving natural resources".
- Generate an image of an urban park with renewable energy sources and green buildings, symbolizing the idea of "conserve environmental sustainability".
- Design an image showcasing energy-saving appliances and LED lighting in a modern setting, representing the notion of "conserve energy efficiency".

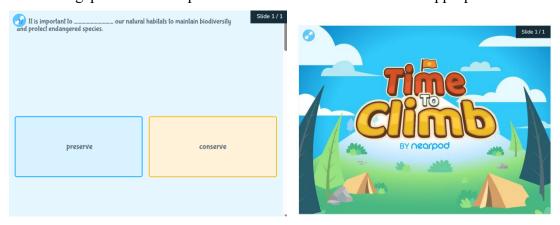


(Screen captures of AI-generated images for the usage scenarios of "conserve")

(After learning the different usage contents of "preserve" and "conserve", students will be given opportunities to explore COCA following the steps mentioned before. Finally, they play a game to reinforce their knowledge.)

Task 3: Word game (Individual work)

Fill in the gaps with either "preserve" or "conserve" based on the appropriate context.



https://app.nearpod.com/?pin=115C910FB8C5E92818815AFA617FA0BD-1&&utm_source=link

Teacher tips: After students finish their work, the teacher will use a Nearpod game activity to quickly address widespread errors and resolve any confusion.

Task 4: Deep Dive with COCA

Part 1: Now I will assign each group a different genre, and you can use COCA to further discuss the usage of "preserve" and "conserve" in a particular genre. For example, I will show you the steps about how to search "conserve" in the academic genre.

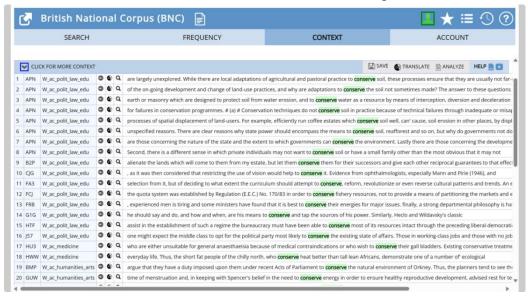
Step 1: Choose the section of genre.



Step 2:

Go into the context.

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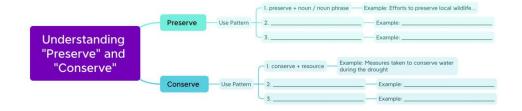
Part 2: Here is the use of "conserve" in the genre of academic. You can carefully read the context and summarize the basic features with your teammates. After concluding these features, you can compare your findings with other groups, observing differences and similarities.

Does any group want to share your ideas now?

Stage 3: Group discussion and synthesis (15 minutes)

Task 1: Try it yourself

Are you familiar with the use of "preserve" and "conserve"? Work in groups of 3-4, and try to summarize the use patterns of these two verbs. Below is the first example for each word to help you get started.



Summarize the difference between the verb 'conserve' and 'preserve'. Match up the words and the language used.



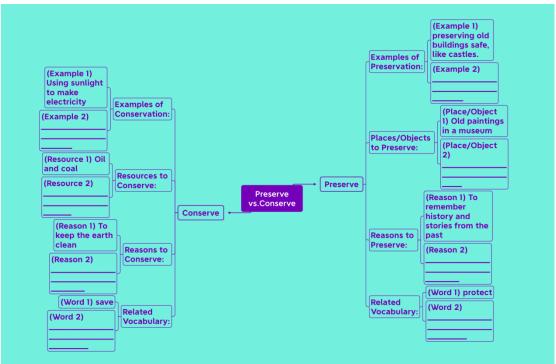
Task 2: Writing Task preparation

Now you may use COCA to find out how these words are used in environmental topics, and complete the Mind Map:

- 1. Fill in examples and reasons for using "preserve" and "conserve."
- 2. If you need ideas for environmental topics, some options are provided.

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Then, talk about your mind map with your group, and share with your friends what you found about "preserve" and "conserve."

Stage 4: Creative Application (15 minutes)

After Creating a Synthesis Poster, you now have a larger vocabulary in the environment. Now please form a group of 4 and write a short article about protecting the environment.

Instruction:

Use "preserve" and "conserve" correctly and use other vocabulary from the synthesis poster as much as possible.

Group work: Write an article about pollution and provide measures to protect the environment. (less than 80 words)

- 1. Write down what you know about pollution
- 2. Use "preserve" and "conserve" in your article







Stage 5: Presentation and feedback (5 minutes)

Task 1:

Work in groups of 3-4.

Instruction:

After finishing your article, please exchange your work with each other and read other's articles carefully using a provided evaluation form by the teacher.

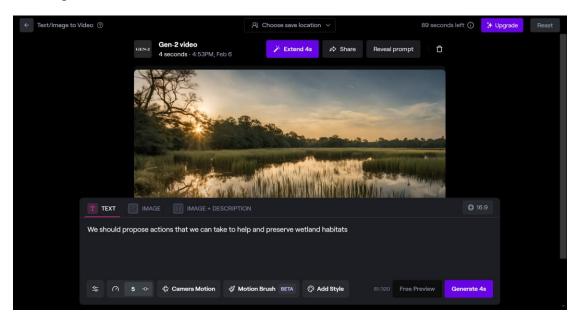
Then, try to check their usage of 'conserve' and 'preserve', and help each other to correct the errors in the articles if necessary.



Task 2:

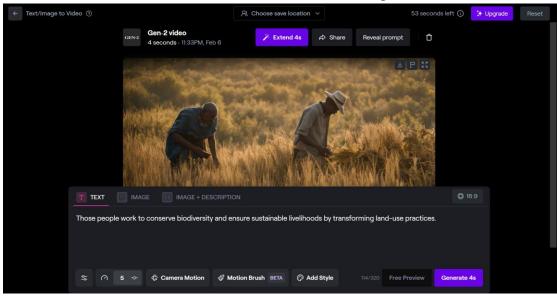
Any volunteer wants to share your sentences involving "preserve" and "conserve" with us? You can facilitate your sentence sharing by using animated motion pictures created with Runway Gen-2 (https://research.runwayml.com/gen2) based on your writing. For example:

If you enter the sentence "We should propose actions that we can take to help and preserve wetland habitats" into the prompt box of **Runway Gen-2**, you can get a motion picture.



(Screen captures of an AI-generated motion picture based on students' writing)

Another example of the sentence involving "conserve" would be "those people work to conserve biodiversity and ensure sustainable livelihoods by transforming land-use practices". Using this sentence as the prompt, you will get another motion picture from **Runway Gen-2**.



(Screen captures of an AI-generated motion picture based on students' writing)