Lesson Plan: AI Art-Based Vocabulary Building & Cultural Exploration Untraditional Places to Live (Sustainable Living)

Teacher: Ivana Opačak, Secondary School of Economics in Slavonski Brod, Croatia **Topic of the lesson**: Untraditional Places to Live (Pearcon's Focus 2, Unit 4: Home, Sweet Home)

Type of the lesson: Reading comprehension, AI art-based vocabulary building, speaking (presentation) & creative expression (story writing & vocabulary riddles/hangman activities creation);

Aim: Encouraging independence in language mastery & presentation skills; outcomes defined by Croatian National Curriculum: SŠ (1) EJ A.1.1., SŠ (1) EJ A.1.5.; SŠ (1) EJ B.1.1.; SŠ (1) EJ C.1.1.-6.

Learning objectives:

- to explore the use of AI-generated art (Bing-created images, AI-assisted stories and vocabulary riddles) as a tool for enhancing vocabulary building, cultural exploration, critical thinking, presentation skills and creative expression in English language learning;

- to create a practical, engaging, and interactive learning experience for students;

- to improve students' vocabulary retention through visual association and real-life discussions.

Learning outcome: By the end of the lesson students will be able to use different AI-tools (Bing/ChatGPT, Bing Image Creator, Photo-to-Story generator) for prompting and generating images, (assisted) creative/short story writing, vocabulary building (riddle creation) and language learning through image descriptions and storytelling. The students will explore and critically evaluate 5 culturally different untraditional places to live, understand the meaning of "united in diversity" and the value of sustainable living.

Teaching materials and aids:

- reliable Internet connection; access to free natural language processing AI-tools (<u>ChatGPT</u>, <u>Bing Copilot</u>) and AI Art Generators (<u>Bing Image Creator</u>, <u>Ideogram</u>, <u>Photo-to-Story generator</u>);

a projector or screen for displaying images; a computer, mobile phones; a dissemination Padlet wall/Wakelet collection;

- teacher's Bing-generated images depicting 5 untraditional places to live, AI-generated image descriptions and a short story;

- teacher's ChatGPT-generated vocabulary handout (riddles, hangman activity);

- rubric for self-/peer-evaluation

Target group: students aged 15 (English level B1/B2)

Duration: 90 minutes (a double-lesson in Croatia)

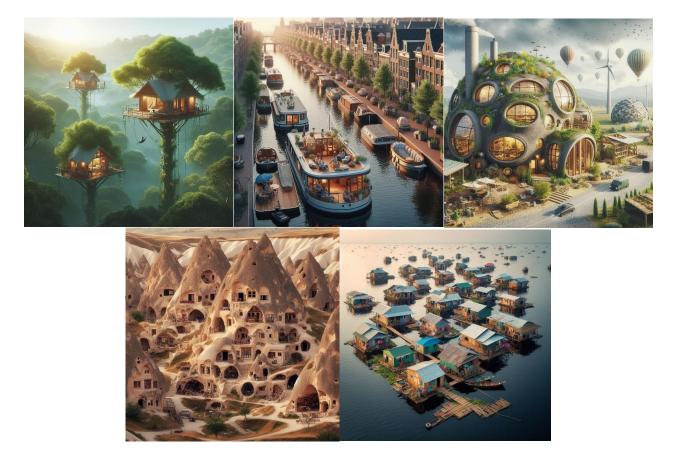
Instructions – Lesson Outline

Warm-up (15 minutes)

• Reinforce previously learned vocabulary (Pearson Textbook: 5 Untraditional Places to Live). Use a teacher-prepared vocabulary handout (attached at the end of the lesson plan).

• Display (teacher's) AI/Bing-generated images of 5 additional untraditional places to live. Ask students to describe them using basic vocabulary, to name (dis)advantages of living there, differences and common features.

• Initiate a brief discussion about where students live and the need for (more) sustainable living.



Introduction (5 minutes)

• Present the list of 5 places in AI-generated images (in random order). (The places were suggested by ChatGPT as the most interesting unusual/untraditional places to live in the world.) Ask students to match the images with their names and AI-generated descriptions.

1 **Treehouse Community, Costa Rica**: There are treehouse communities in places like Costa Rica where individuals live amidst the treetops, creating a unique and eco-friendly living experience. This can provide an opportunity for students to explore sustainable living practices.

2 **Houseboats in Amsterdam, Netherlands**: Amsterdam is known for its picturesque canals, and some residents choose to live on houseboats. Living on the water offers a distinct lifestyle, and students might find it intriguing to imagine a home that gently sways with the water.

3 **Earthship Homes, New Mexico, USA**: Earthships are sustainable and self-sufficient homes built with recycled materials. These unique dwellings often incorporate renewable energy sources and water conservation systems, making them an interesting example of eco-friendly architecture.

4 **Cave Dwellings in Cappadocia, Turkey**: In Cappadocia, some people live in cave dwellings carved into the soft rock formations. These caves have been used as homes for centuries and are a fascinating example of architecture integrated into the natural landscape.

5 **Floating Village, Tonle Sap Lake, Cambodia**: Tonle Sap Lake is home to floating villages where houses are built on floating platforms. This unconventional way of living is shaped by the lake's seasonal changes in water levels, and it provides a glimpse into a lifestyle that revolves around water.

• Provide definitions and pronunciation guidance for each challenging word.

Main Activity Cultural Exploration & Presentation Creation (20 minutes)

• Divide the class into 5 groups (per 4 students).

• Let every group explore one place from the list/images. Instruct students to name most important features of people's lifestyle, to critically evaluate the place (disadvantages), and the value of (sustainable) living there. Instruct them to assign roles for presenting each part of their work.

Story writing & vocabulary-building (25 minutes)

• Read teacher's Bing-generated story to the class (added below). Let students guess what image it was based on (Cave Dwellings in Cappadocia, Turkey) and the 5 topic words (cave, fairy chimneys, solitary, hot air ballon and breathtaking view). Explain the meaning of new words (these would probably be the ones bolded and underlined, depending on students' English level).

Once upon a time, in a land far away, there existed a **solitary cave** <u>nestled</u> amidst the unique <u>rock formations</u> of **fairy chimneys**. It was a silent witness to the changing seasons and <u>evolving</u> civilization. One day, a group of high school students discovered this hidden <u>gem</u> during their educational tour. The cave was not just an ordinary one; it bore <u>inscriptions</u> and drawings that told tales of an ancient civilization that <u>thrived on</u> sustainable living.

The students were intrigued by the stories depicted on the walls of the cave - tales of people who lived harmoniously with nature, <u>utilizing</u> resources <u>judiciously</u> and minimizing waste. They learned about <u>innovative</u> methods used by these <u>ancient</u> people to <u>conserve</u> water, recycle materials, and <u>harness</u> natural energy sources.

Inspired by these revelations, they **embarked on** a journey to **revive** those sustainable practices in their own lives. They **<u>initiated</u>** projects that promoted recycling, <u>conservation</u> and sustainable living within their community. As they worked diligently towards their goal, **hot air balloons** <u>adorned</u> the sky painting it with <u>myriad hues</u> at dawn - a reminder of nature's beauty worth preserving for generations to come.

The **breathtaking view** of the fairy chimneys dominated the landscape, and the students realized that they were not just <u>mere spectators</u> but active participants in preserving the environment. They felt a sense of responsibility towards the planet and <u>pledged</u> to continue their efforts towards sustainable living. Do you understand the importance of sustainable living? Can you take action towards a greener future? • Instruct students to write a short story based on their image. They should use the vocabulary (5 topic words on their choice) introduced earlier (warm-up).

• Instruct students to use ChatGPT to learn the meaning of new words, then to choose 5-10 new words from their story and create ChatGPT-generated riddles/ hangman activity for the class. They can also create a vocabulary quiz (using <u>Genial.ly</u> or <u>Quizlet</u>) for everyone to play at the end of the lesson.

• Ask students to generate images based on their story. See teacher's (*old* and) new images below.



Vocabulary Reinforcement (15 minutes)

- Let students present their work cultural info, Al-generated images, stories (and their morals). Students can try to guess the places and stories' plots based on the images. They can also provide image descriptions, guessing topic vocabulary *behind* images.
- Introduce vocabulary reinforcement activities using riddles and Hangman, possibly vocabulary quizzes.

Discussion and Reflection (10 minutes)

- A brief discussion is facilitated after each group's presentation, and constructive feedback is provided.
- Engage the class in a discussion about the challenges they faced during group work.
- Encourage students to share strategies they used to remember image-/story-related vocabulary.
- **Disc**uss the benefits of the lesson (activities) and encourage participants to reflect on how they can adapt these activities to their English classes.
- Reflect on the importance of sustainable living and understanding cultural differences.
- Prepare evaluation rubric (a scoring guide) for peer-assessment. Every student should assess his/her own work and group contribution, as well as the work of every student within his/her group.

Criteria	Excellent (3 points) Active participation, great contribution	Good (2 points) Active in some activities (mostly the one of interest), contributed to some extent	Poor (1 point) Not very active, did not contribute much
Group work			
Image description			
Vocabulary building			
Al-generating activities			
Creative expression			
Presentation			

6-9 (Pass); 10-12 (C); 13-15 (B); 16-18 (A)

VOCAB PRACTICE (Handout) - RIDDLES:

Prompt to ChatGPT: Act as a foreign language learning teacher. Generate 10 simple riddles where students can guess the following words: stilts, breathtaking, treehouse, scorching, eruption, sea gypsies, government, souvenir, trading center, mining town.

Riddle: In the sky, I stand tall on my legs, swaying above the ground. Who am I? Answer: Stilts (Croatian štule). Riddle: When you see something truly amazing, it takes your breath away. What is it like? Answer: Breathtaking Riddle: Birds live in it, children dream of playing in it. It's a special house. What am I? Answer: Treehouse Riddle: In summer, the sun is extremely hot, the sand is hot. How would you describe this heat? Answer: Scorching Riddle: Mountains spit out fire, an angry land. What is happening? **Answer: Eruption** Riddle: People of the sea who don't have a fixed home. What do you call them? Answer: Sea Gypsies Riddle: They create laws, make decisions for the country. Who are they? Answer: Government Riddle: When you travel, you often buy something to remember the place. What is it? Answer: Souvenir Riddle: People come from everywhere to trade goods. Where does this happen? **Answer: Trading Center** Riddle: People work underground to extract precious resources. Where are they? Answer: Mining Town/Mine Riddle: I am a gemstone of a beautiful blue-green color, often associated with tropical beaches. What am I? Answer: Turquoise Riddle: In the depths of the earth, dark and mysterious, I sometimes shelter hidden treasures. What am I? Answer: Cave Riddle: I am the home to many exotic plants and animals, where the rain falls abundantly. What is my name? Answer: Rainforest Riddle: On the surface of the moon, I am a giant hole created by an explosion. On Earth, I am also a sign of danger. What am I? Answer: Crater

Can you **create a hangman activity** using these words: traffic jam, lush vegetation, nomadic tribe? Only in English please. Can you add a meaning for each word and specify the number of missing letters?

T _ _ _ _ J _ _ (Two words) traffic jam

Meaning: A situation where vehicles are stuck in a line and cannot move.

L____V _____ (Two words) lush vegetation

Meaning: A dense and luxuriant growth of plants and trees.

N _____ T ____ (Two words) nomadic tribe

Meaning: A group of people who move from place to place with no permanent home, often in search of food or grazing land.