Unit: Aqua Bodies Lessons 5 of 6

Education in Action Project - Part 1

Summary: This lesson plan is based on the Aqua Bodies project (p.48 Project Wet Handbook). In these lessons, students will synthesize the knowledge from previous lessons to produce a Youtube video clip to share with their counterpart students (Salinas-Cameroon).

NOTE: T= teacher, Ss= student

Setting:

- Middle school biology class
- at a private secondary school in Yaounde, Cameroon, or public middle school in Salinas, CA, US

Learners:

- 25-30 middle school biology students
- Ages range from 14-17 years old
- Majority are English language learners
- various L1s and home countries
- many demonstrate high proficiency English speaking skills

Class duration:

• 50 minutes

Previous class:

- Global Water Link curriculum
 - O Unit 2: Poison Pump
 - O Unit 3: Aqua Bodies Lesson 1-4

Materials and equipment:

Project Wet textbook

Whiteboard and whiteboard markers/ blackboard and chalk

Computer and projector

Aqua Bodies: Education in Action Project - Part 1

Phase/Activity	Time	Teacher Behaviors	Learner Behaviors	Materials	Language Issues	Outcomes: SWABTs	Anticipated Problems
Warm-up/Noticing	10	- Play concentration with "Water drop" cards from p. 50. Explain concentration game rulesLeads student in reviewing the material from previous lessons	-Activate schemata of content from previous lessons in the Aqua Bodies unitPlay the "Concentration Matching" game to review the main concepts from the previous lessons	PPT and computer OR flashcards on board cards for concentrat ion game (see Aqua Bodies pg. 50 in Project wet textbook)	previously learned vocabulary	Recall key ideas, demonstrate understanding by matching key terms with definition	May take a long time. T keep an eye on the clock.
Pre-task	5	-Explain the project T: Make an informational video presentation about what we have studied in this unit. Choose three of the reasons why water is essential to the bodyT write sentence frames on the board and models the expected output: "I think is the most important reason because" This is for students who need extra scaffolding	-Listen and take notes. -Summarize the directions (OR explain the directions to your partner.) - Ask questions about directions to the teacher.	PPT computer example video presen- tation Teachers without computers or TV could burn the video file to a DVD and share it with the class on a	Sentence frame example: Water is essential to the body because	Explain the main idea of the project. Summarize the directions.	Ss might be unintereste d in the project and may not participate. All them to choose designs that would make the project more interesting for them.

		-Comprehension check the Ss understand directions.		TV.			
During Task: Think - Pair - Share	10	-Allow students time to work independently. -Assist students to form groups of 4. Assign them different duties or "roles" - such as: reporter, recorder, time keeper, ect	-Ss take 5 minutes to silently brainstorm ideas. Afterwards, they share with a partner. -Form a group of 4, decide different roles. share ideas. As a group, generate a list why water is essential for the body.	student generated reasons	Ss may not know how to write in complete sentences. Allow them to write down key words	Generate a list of reasons.	Some Ss might not have the language to brainstorm ideas quickly. work with Ss individually, personalizin g the sentence frames.
Consensus Seeking: Rank the Reasons	10	-T prepare a scaffold for students to write sentences. -During the task phase, keep track of Ss language production and check for errors for future "focus on form" activity	In groups of 4, choose the top four reasons.	scaffolding worksheet or PPT with list of questions to help students generate ideas.	Language of negotiation Scaffold: We think the first most important reason is	-Compare and decide the top reasons.	Provide a democratic way to solve disagreeme nts about opinions. EXAMPLE: An instructional poster with useful expressions of how to agree/ disagree respectfully
Team Webbing	10	-Monitor, circulate, answer individual and group questions. Make sure the students are	-Create the draft of a poster to explain the reasons why. Write the 4 reason on the paper	Poster paper markers color	Language of negotiation	-Ss will be excited and curious about the relevance of science to/in the	

		staying on task.	-Ss who finish quickly can use laptops to type-up versions of the script. -Rehearse the presentation in preparation for next lesson's recording	pencils	Scaffold: We think the first most important reason is	real worldSs should be able to use technology to effectively communicate and collaborate with international counterparts.	
Post Task: Wrap-up	5	-Remind students they will rehearse and record the videos in the next class. -Solidify student engagement and "buy-in" in the project by confirming their understanding - Encourage Ss to practice their parts at home.	-The reporter from each group gives their most important reason. A volunteer will explain the purpose of the task and what they'll do in the next class.	notes from today's work, scripts to practice at home	none	-Summarize and share group opinions	

Aqua Bodies: Education in Action Project - Part 2

Phase/Activity	Time	Teacher Behaviors	Learner Behaviors	Materials	Language Issues	Outcomes: SWABTs	Anticipated Problems
Warm-up		-Check that students have all their materials available	-Team representative reiterate the instructions.	none	none	Ss are mentally prepared to work independently	
Pre-task		Re-Explain instructions: -Comprehension check for understanding -Ask Ss to reiterate the rules of independent work (stay on task, ask for help when needed, ect)	-Prepare to film You-tube videos. Check their group has all the materials neededRehearse the scripts	Sample video: https://w ww.youtu be.com/ watch?v= -whTuTfr k20			
During Task		Monitor and answer questions. -During the task phase, keep track of Ss language production and check for errors for future "focus on form" grammar practice activity Keep students on task	Assign one student in each group to be the media tech to record the youtube video. Ss have up to 3 times to attempt to record, to limit the time it takes to record a video. Edit on school laptops post to the internet	cam- corders OR cellphone cameras		Students with different L1s teach each other their newly gained scientific knowledge while also practicing target language	

FOR TEACHER: Post-task

edit the videos to save class time.

Post to the internet and share with the counterpart school.

Follow-up	Provide opportunities for peer-to-peer interaction, and authentic output Provide models for how to write sentences. Provide a sample letter as a guide if needed.	Write a reflective email to their counterparts saying what they learned from the video.	Computer access to email	The most interesting thing I learned was	-Ss will gain perspective, knowledge, and respect of another culture. -use technology to effectively communicate and collaborate with international counterparts.		
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