PPAT® Assessment

Library of Examples – Science

Task 4, Step 2, Textbox 4.2.1: Instructional Strategies

Below are two examples of written responses to Textbox 4.2.1 as excerpted from the portfolios of two different candidates. The candidate responses were not corrected or changed from what was submitted. One response was scored at the Met/Exceeded Standards Level and the other response was scored at the Does Not Meet/Partially Met Standards Level. This information is being provided for illustrative purposes only. These excerpts are not templates for you to use to guarantee a successful score. Rather, they are examples that you can use for comparison purposes to see the kinds of evidence that you may need to add to your own work.

The work you submit as part of your response to each task must be yours and yours alone. Your written commentaries, the student work and other artifacts you submit, and your video recordings must all feature teaching that you did and work that you supervised.

Guiding Prompts for Task 4, Textbox 4.2.1

a. How did you use academic content language to advance the understanding of the concept being taught in this lesson? Cite examples from the video to support your analysis.

b. How did you engage students in critical thinking to promote student learning? Cite examples from the video to support your analysis.

c. How did you use questioning skills to promote student learning? Cite examples from the video to support your analysis.

d. How did you integrate literacy into the content you taught to promote student learning? Cite examples from any part of the lesson to support your analysis.

Example 1: Met/Exceeded Standards Level

a. At the 0:28 mark, I defined a vacuole as an organelle instead of calling it a part of the plant cell. This use of academic content language serves to further student learning by identifying things by their proper scientific names instead of using common terms. My use of the vocabulary words during the presentation of lessons will make the students more likely to remember the terms and correctly apply them, which will further their learning. At the 4:00 mark, I gave the students an example of how forensic scientists can solve a crime by taking a cheek swab and extracting the DNA from the nucleus of a cheek cell. This example related to a previous unit on genetics where the students had to determine paternity based on DNA sequences. I also related the nucleus to the previous unit by referencing meiosis and chromosomes. This use of academic content language served to further student learning by connecting the current topic to their prior knowledge.

b. I engaged the students in critical thinking to promote their learning by having them engage in a group discussion at the end of the class. The Exit Ticket had the students reflect on the lesson and share their answers with the group and the class. At the 10:36 mark, one of the students can be seen rolling a die and getting the question "What did you learn today?" The group then engaged in a discussion and shared their thoughts. This promoted student learning by making the students analyze their own knowledge and present it to their peers. The other students could learn from the thoughts and opinions voiced by their classmates. The Exit Ticket further engaged the students in critical thinking by asking them to come up with a test question based on the lesson. At the 13:38 mark, one of the groups shared their test question: "Name 3 parts of a cell and describe the functions of each." This demonstrated that the students could think critically and approach the content from an instructor's viewpoint. They analyzed the lesson and thought about how they may be asked to demonstrate their knowledge on an assessment. At the 14:38 mark, another group shared their test question: "Describe the difference between the nucleus and the nucleolus." This question showed that the students analyzed the lesson, thought critically, and came up with a valid question.

c. At the 2:48 mark, I asked the class if anybody had ever heard of the nucleus. Several students answered that they had. This question served to activate their prior knowledge and get them thinking about the organelle that we were about to discuss. I used this as a lead-in to begin the discussion of the nucleus. At the 10:14 mark, a die can be seen on the table and was used as an Exit Ticket. This die has 6 different questions on it. The students had to roll the die and read the question on the top side. They had to discuss their answers as a table and come up with a group answer. Examples of the questions are "What was the hardest part of the lesson?" and "What surprised you about the lesson?" These questions made the students reflect on the lesson and analyze what they had learned. The questions and activity served to further student learning by having them share their answers and opinions with their groups and the class.

d. I integrated literacy by giving the students a slide show presentation that went along with my presentation. The slide show presentation contained the functions of each organelle, which was the critical information, and some other pieces of information, such as a basic description of each organelle. The students had to read each slide and decide what was important. They had to extract the critical information and write it down in their guided notes while ignoring the extraneous data. The students can be seen doing this during the first 8:00. Specifically, in a close-up shot at the 5:10 mark, a student is sketching a chloroplast before beginning to read the slide and write down the functions of that organelle. This use of the slide show presentation served to promote literacy by allowing the students to practice their critical reading skills. This practice furthers their learning by honing their abilities to extract necessary information from a text and ignore the fluff.

Refer to the Task 4 Rubric for Textbox 4.2.1 and ask yourself:

What evidence from the video is cited to support the candidate's analysis of the following?

- Using academic content language in the lesson
- Engaging students in critical thinking in the lesson
- Using questioning skills in the lesson
- Integrating literacy into the lesson

Why is the analysis complete?

Example 2: Did Not Meet/Partially Met Standards Level

a. I used content language in the beginning of the lesson to help advance understanding of the concept being taught. For example, in my video it shows me giving directions to construct a statement using the following words. These words that are given to use are the vocabulary words from previous lessons and the current lesson. The goal was to get the students to relate the words together in a sentence to connect prior learning to the new concept.

b. In the video I asked the students how this experiment relates to warm and cold fronts that the students are currently learning about. This promotes critical thinking because I do not give them the answer. I want the students to figure out how the experiment and the concept are related and be able to connect the two.

c. The questioning skills I use, as shown in the video are asking the students to write down a hypothesis about what they think will happen when hot water and cold water mix.

d. During this lesson I did not use any literacy because this portion of the lesson was a lab experiment. However, in a prior lesson I had the students read about the difference between a warm and a cold front and complete a venn diagram to demonstrate the key differences and similarities between the two. elt board for the children to connect the felt board pieces to the printed words. (entire video)

Refer to the Task 4 Rubric for Textbox 4.2.1 and ask yourself:

What evidence from the video is cited to support the candidate's analysis of the following?

- Using academic content language in the lesson
- Engaging students in critical thinking in the lesson
- Using questioning skills in the lesson
- Integrating literacy into the lesson

Why is the analysis minimal?

Suggestions for Using These Examples

After writing your own rough draft response to the guiding prompts, ask the question, "Which parts of these examples are closest to what I have written?" Then read the 4 levels of the matching rubric (labeled with the textbox number) and decide which best matches your response. Use this information as you revise your own written commentary.

Lastly, using your work and/or these examples as reference, consider what you believe would be appropriate artifacts for this textbox.