

**Assessment of Classroom Teaching
Science Education
Virginia Tech**

Teacher Candidate: Anza Mitchell

Date: 11/14/17

Name of Lesson: The Atomic Model

School/Grade: Blacksburg Middle

Observer: Kregg Quarles

1. How was the lesson constructed and organized?

5-E model. This was the explain and elaborate portion of a two-day lesson. The students started by reviewing the atomic theories they learned the previous day. Then the teacher went into further depth of each theory by discussing the history of each model and the scientists who created them. She used the smart board to project information and record student input.

2. How is this lesson designed to meet the needs of this particular population?

From lesson plan: "Playing cards/posters will be worked on and presented in groups so students who may have difficulty with fine motor skills or difficulty presenting can participate." The "playing cards" also allowed the students to access and learn about the scientific information in a creative manner, rather than simply copying notes off the board.

3. What strategies did the teacher use for engaging students?

The teacher centered the lesson around the history of science. She used visual aids (slides and videos) and engaged students' multiple methods of learning by having the students express information in both written and artistic formats. She also incorporated math skills to fill out charts about quarks.

4. How did the teacher manage and monitor student learning?

She asked the students questions and waited for answers rather than filling in answers.

5. How did the students respond to the activities?

Students were engaged in making the playing cards and volunteered answers.

6. What are suggestions for this lesson and for future planning?

In second class, you did a better job of engaging the students.

- In the engage, you wrote down student answers to validate their input and accuracy
- When going through the slides, you got out from behind your desk and pointed to the parts of the model that you were speaking about simultaneously. The motion of your hands for the Rutherford experiment was a lot easier to follow because you included the motion of particles in the experiment and ended up emphasizing the important information.
- For the cards, you paused a little longer and this allowed students to finish writing before you presented more visual information. This leads to students asking to repeat information less often.
- After the quark video, you asked them what they learned and recorded one answer. You should give them a little more time and record down all of their observations. You could then organize the information they

noticed, connect it to what you intended to point out and then include the other necessary information

- I think the students were able to follow a lot better when they drew the model on the front first, *then* wrote the information on the back
- Verify not only the correctness/accuracy or incorrectness/inaccuracy of student answers but also the reasons why answers and ideas are correct/accurate or incorrect/inaccurate