Assessment of Classroom Teaching
Secondary Science Education
School of Education
Virginia Tech

Teacher Candidate: Anza Mitchell Date: Nov. 14, 2017

Name of Lesson: The Atomic Model School/Grade: BMS/8th

Observer: George Glasson

1. How was the lesson constructed and organized?

   Ms. Mitchell began by reviewing how theories of atoms change over time. This portion of the 5-E model focused on the explanation phase. She discussed different scientists and historical models of the atom by projecting on the smart board.

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 learned 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?

   Ms. Mitchell employed history of science information in her lesson regarding the changing theories of the atom.

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

   Ms. Mitchell has an engaging "teacher voice". Her explanations are clear and informative. She allowed adequate wait time for students to respond to her prompts.

5. How did the students respond to the activities?

   The students were actively participating in the lesson, taking notes and responding to teacher questions.

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

   Label "electrons", "protons" or "neutron's" on initial diagrams of atom. Auditory learners can pick up verbal clues but some students would benefit from labels.

   During explanation of Rutherford and other scientists' models, ask a more questions (e.g. how do you think these alpha particles traveled through the gold foil). This would engage the students a bit more with the presented information and would allow you to check for understanding. Ms. Mitchell did this more with the "cupcake" analogy of the Bohr model. The students responded well. You should frequently ask students questions when you are conveying information - this may be asking questions to specific students while you are circulating around the room - especially if they are not engaged. This is a valuable form of formative assessment.

   Circulate more around the room during the lesson. This allows you to monitor what students are doing at their desks.

   Be sure to add quark video to your lesson plan. Also, include open-ended questions you might ask.