

Vocabulary Review – 8th Grade Geometry

Grade Level: Eighth Grade – Middle School

School: Fees Middle School

Location: Tempe, Arizona

Videographer: Dima Yaremenko

Elapsed Time: 11:03

Introduction: Dr. Archer is reviewing vocabulary terms taught in the previous lesson: circle, diameter, radius, degree, and chord. Students are responding to review questions by writing answers on slates and displaying their answers.

Focus: As you view this video, take notes on any good instructional practices that you observe. Focus particularly on the benefits of using slates as a tool for review. Also, think about any “missed opportunities” that you would share with the teacher.

Feedback:

Good practices:

- 1. Vocabulary Review.** Often vocabulary terms are introduced but not reviewed. If students are to retain vocabulary terms, the following instructional sequence needs to be followed: a) dynamic initial introduction of vocabulary, b) distributed practice of vocabulary on subsequent days, and c) planned cumulative review of terms.
- 2. Listing critical attributes with definition.** When presenting definitions, Dr. Archer listed the critical attributes or parts of the definition, an excellent practice when teaching math concepts. Students can then use the list of attributes to determine if an exemplar is an example or a non-example.
- 3. Use of Response Slates.** Having students respond by recording answers on slates had many benefits including:
 - a. all students were involved
 - b. all students were held accountable for responding
 - c. the teacher could monitor the answers of all students rather than just a few if they had responded on paper
- 4. Explaining responses.** Students had to explain their answers to their partners. The act of teaching a concept to a partner deepens understanding of the term for both partners. Also, because the students had an opportunity to think about their answers and rehearse

- their answers, when called on they had better developed, accurate responses.
- 5. Asked information during review.** When reviewing information, the teacher should ASK for information rather than reteaching information. Many teachers, including Dr. Archer, have a tendency to reteach rather than request information during review. On the concepts of radius, diameter, degrees, and chord, Dr. Archer asked questions to verify understanding of concepts.
 - 6. Use of examples and non-examples.** To really understand a concept, you must be able to discern between examples and non-examples. Dr. Archer checked understanding by having students identify and generate examples and non-examples.
 - 7. Use of critical attributes.** When reviewing circle and chord, Dr. Archer showed students how to use the critical attributes of a definition to determine if an exemplar was an example (all attributes are present) or a non-example (one or more attributes are missing).
 - 8. Monitoring responses.** Dr. Archer carefully monitored all of the responses of the students and provided immediate feedback on responses. When students were writing responses and sharing with partners, Dr. Archer circulated around the room examining responses and providing feedback (corrections, praise, encouragement).
 - 9. Promoting use of math vocabulary.** When listening to student responses, Dr. Archer encouraged the use of math vocabulary. For example, when a student said “middle of circle”, Dr. Archer indicated that “center of circle” would be a better explanation.

Missed Opportunities

For the most part, Dr. Archer asked students for information during the review. However, in a few cases she retaught information before requesting responses. As a result, the students did not have to think and retrieve the information cognitively. Also, Dr. Archer can not be certain of concept mastery.