Danielson 3B: Instruction - Questioning & Discussion Techniques.

INTASC 5: Application of Content - *Teacher connects concepts & differing perspectives for critical thinking, creativity & collaboration.*

Title: Essay on Questioning & Critical Thinking

<u>Description:</u> This is another essay regarding an example made up about a teacher who is struggling in a certain area in the classroom. This teacher has been approached by the supervisor about her questioning ability. The questions she asks in class are not in depth enough and do not challenge the students to think when answering.

Rationale: This essay required me to resolve the teachers problems when it comes to questioning, such as making the questions more advanced so that way the students needed to be engaged to answer the questions. It would also be beneficial so that way the same students wouldn't answer the questions repeatedly. The essay required me to think as if I was in the classroom and what I would do if I was in that situation.

1. Dear Ms. Lupe

I hope this reaches you well. I have read your letter and I believe I can offer a few tips as to how to improve your questioning skills. The biggest suggestion I can make is to get tougher questions. Asking the students, the who, what, when, where how and why is not going to induce critical thinking. Asking questions that require one-word answers is not going to get them thinking. The questions should be interesting and attention-grabbing. It should make more than just two kids want to answer the whole class. These questions should encourage higher level thinking, not the basics. Probing the students of more questions to get more information out of them is also a good idea, to get them to say more is a good way to solve this issue. If you are still not getting participation from your students, then it is good to wait a few seconds for other kids to raise their hands. Giving the students eight seconds is a good amount of time for others to think of a good answer, and if they don't it is okay to call on kids who aren't raising their hands to get them involved. Yeah, they may not like it, but it is good to get them involved and if they get it right then it will encourage them to answer more often. If you follow these simple suggestions, I bet your students will be more engaged, and it will get the supervisor off your back, lol!

Best wishes,

Tyler Litts

Danielson 3c: Instruction: Engaging Students in Learning

INTASC 8: Instructional Strategies: Teacher uses a variety of instructional strategies to encourage in-depth learning, skill building, etc.

<u>Title:</u> Polygon Lesson

<u>Description:</u> This lesson was a direct lesson about polygons for seventh-grade students. This lesson engages students in learning by giving them a lot of practice problems to do to make sure they are understanding the content. Repetition is a good form of memorization, therefore if the students practice enough, it will help them understand the content better.

Rationale: This artifact is useful because it is a good way for students to practice their content, it is an easy way for them to get better at the content itself and ensures that they know more about it than when they came into the class. With certain questions asked during the lesson and the practice problems during class it gives the opportunity to keep the students engaged with what is happening round them and on board.

Direct Lesson Plan

<u>Title:</u> Polygons (Day 1)

Grade Level: 7th

Content Knowledge:

Skills: Students will be able to understand what a polygon is and what makes it a polygon and

will need to be able to determine the sum of the interior angles of said polygon.

Content: The lesson will involve the understanding of polygons and how to determine what

makes a polygon. Students will determine if a shape is indeed a polygon or not and be able to explain why

it is or is not. After that they will be able to determine the sum of the interior angles of each polygon

depending on how many sides it has.

Rationale: This lesson is important because problem solving is a skill everyone uses every day in life.

Therefore, students using these skills in school and using them at a young age will only make them better

at using this when they need to in life. Being able to recognize a problem and determining what is the best

way to solve the problem is a very useful thing to learn in school.

Standards: CC.2.1.7. D.1 Analyze proportional relationships and use them to model and solve real-world

and mathematical problems.

CC.2.2.7. B.3 Model and solve real world and mathematical problems by using and connecting

numerical, algebraic, and/or graphical representations

Goal: Students will be able to analyze shapes and figures and will be able to graph and interpret the said

shapes.

Essential Question: Where do we see triangles and polygons in real life?

Objectives:

- 1. After direct instruction, students will be able to determine what is a polygon and what is not on the board to be checked for 80% accuracy.
- After direct instruction, students will be able to determine the sum of the interior angles of a
 polygon based on how many sides it has on the study guide to be completed and checked for 80%
 accuracy.

Formative Assessment:

Students will correctly determine what a polygon is and what it's name is. They will also be able
to determine the sum of the interior angles based on its sides as well on their homework to be
graded as a homework grade the following day.

<u>Instructions for during class:</u>

1. Attendance and Warm-Up (5 minutes)

a. The teacher will take attendance as the students walk in, as they enter the class they will try to determine if the shapes on the board are polygons or not. Once the teacher gets the attendance, he will then go over the correct answers with the students.

2. **Introduce Lesson** (35 minutes)

a. The teacher will pass out the study guides to the students before they begin their lesson for the day. Once they all get a copy the teacher will write the definition of a polygon on the board to introduce the lesson to the students. A polygon being a shape with 3 or more sides that is a simple, closed figure. Once the students copy the definition, the teacher will draw some shapes and tell them whether they are polygons or not. Once the teacher draws and explains some, then the students will determine for themselves if they are polygons or not. Some of the shapes being a triangle, squares, hexagons, etc. Some of the shapes will have curved sides, which are not polygons. After that, the teacher will demonstrate how to determine the sum of the interior angles of polygons. He will put the

formula on the board for the students to copy down, which is (n-2)180. Which means the number of sides minus 2, and then it is multiplied by 180. The class will then do some examples on their own from the board to demonstrate they know the concepts. Once they finish that up then the class can conclude.

3. Conclude Class (5 minutes)

a. As the students wrap up their classwork, the teacher will tell them their homework and will then conclude class. The students will sit and wait for the bell to ring quietly.

Danielson 3D: Instruction - Using Assessment in Instruction

INTASC 6: Assessment - Teacher uses multiple methods to assess student growth, progress, and to guide decision making.

Title: Unit Assessment

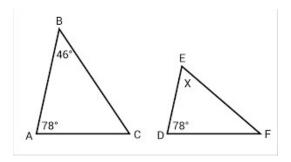
as a teacher.

Description: This assessment shows my ability to make a final assessment to determine the students comprehension of what has been taught to them. The assessment has multiple different styles of questions to give a variety of ways for the students to go about answering the questions. The test incorporates all the knowledge that the students had learned over the course of the unit.

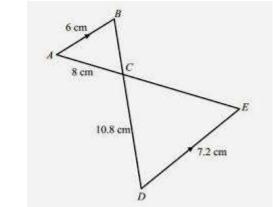
Rationale: This assessment proves my ability to assess students because I was able to come up with questions from the entire unit and make the questions difficult enough for the students to think critically and try to recall what they had previously learned. In doing so, this gives me the opportunity to also assess how well I did at teaching the lesson to the students, based off of their grades on the exams, giving me a chance to reflect and determine if there is room for me to grow

Find the values for the variables if necessary and then prove each set of triangles is similar, and then write the similarity statement.

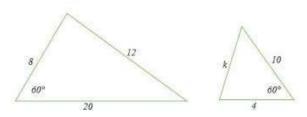
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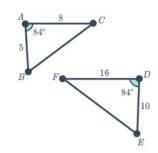
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Danielson 3d: Instruction: Using Assessment in Instruction

INTASC 6: Assessment: Teacher uses multiple methods to assess students' progress, and to guide decision making.

Title: Formative Assessment

<u>Description:</u> The formative assessment I used was in my unit and it was a review quiz that had the students recall information from the past few chapters. It was a very short assessment that was just used for students to try and keep the topics in their heads so they could remember better for their upcoming test.

Rationale: This assessment represents this standard well and shows how assessments can be used to assess progress and determine how the students are understanding the content, and if they need to re learn any subjects at all before it is time for them to take their test. If the students do well on the assessment, then the teacher knows that they are prepared for their test, but if they do not do well, then the teacher should go back and reteach the topic.

REVIEW QUIZ

Answer the following open-ended questions based on the knowledge learned	
in class.	
1. What is the figure called that has 6 sides?	

3.	How many sides does a nonagon have?

2. How can you tell if a shape is a polygon or not?

DRAW A ROTATION OF A TRIANGLE ON A GRAPH THAT IS ROTATED 270 DEGREES CLOCKWISE.

(Students will use this space to draw their rotation of the triangles)

Danielson 3e: Instruction: Demonstrating Flexibility & Responsive

INTASC 2: Learning Differences: Teacher uses understanding of differences & diverse cultures to enable individual learning.

Title: Adaptation in Unit

<u>Description:</u> In the units we made for our class, we needed to add a section at the end that describes what we would do if our students needed extra help or if they were gifted. This section demonstrates the ability to adapt and be flexible for any student that you may have in your class.

Rationale: This item is a good demonstration of flexibility, as it demonstrates the adjustments I would make if I had a student who was exceptional in my classroom. It says the adaptations that I would use if I had a student who needed extra help, or if the student were to finish early.

Adaptations: Students who require extra time on exams will be granted that time, as well as kids who need learning support will get their required assistance. Students who finish their work early will have the ability to either complete the bulletin board or will do work for other classes until their classmates are done with their work as well.