

Segment 1: Using Language Objectives with Students

In this video, the teacher uses language objectives with students at the beginning of the lesson. He ensures the objective is written using language that is understandable to students with different levels of English proficiency.

Teacher: Today our learning objective is gonna be finding unit rates or ratios in a proportional relationship, okay?

And today we have a language objective. It's going to be "to speak," okay? You're gonna have to talk to each other.

And there are certain things that I'm looking for whenever you guys are talking to each other. Okay, you need to speak about the new vocabulary; use it appropriately; and whenever you're called on, make sure you're using those little key phrases that I have there, those little—that little criteria that I have. Everybody read that up there real quick. Okay, so we know that a great response is gonna use a complete sentence. I don't want just this one word or "Yeah, I suppose." Nothing like that.

Okay, you need to have a strong and clear voice. Whenever you're talking in your group, make sure you're talking about the math, and that way when you're called upon, then you've practiced it already and you already know what you're gonna say. Use that academic vocabulary.

If you get stuck on your vocabulary, you can look over to the green board up there. Everybody focus on that. When we're using proportional relationship, unit rates, rates, and ratio, those are gonna be our academic vocabularies today and/or words.

And then make sure that you're acknowledging people whenever you start. So let them know, do you agree, do you disagree with them?

Those are the things we're looking for whenever you're speaking.

Segment 2: Using the Frayer Model in a Gallery Walk Activity

Teacher: Before we start actually looking at these problems we're going to do a couple activities. The vocab, I mentioned earlier: similar triangles, congruent triangles, proportion—that's a big word, interior angles, polygons, and corresponding. What we're going to do right now is at your tables—your tables are good size—at your tables, we're going to break into groups and look at some of these vocab words in a little more detail.

And we're going to use Frayer Model. Okay, we used it before. So, the definition—when you write the definition, do I want the mathematical definition?

Student 1: No.

Student 2: No.

Teacher: No. What kind of definition do I want, Logan?

Student 1: In our own words.

Teacher: In your own words so you understand it, so you know what you're talking about. Then characteristics: what makes it special, what makes it different, what makes it unique; examples and then non-examples. And we add a little twist to it. I'm going to give each of your tables a couple magazines, and I want you to kind of see if in those magazines you can find examples and non-examples. Can you find examples of similar triangles? Can you find examples of proportion, interior angles? Can you find those things in these magazines? If you can't, it's all right; just draw it. You know, but I want you to see if you can find some of these real-world problems in here. All right? So, we're going to work on that. And your Frayer Model is going to be on this big butcher paper, so you're going to make it nice and big, as big as you can so that everybody can see. And then we'll tape these on the wall. Questions?

Student 3: No.

Teacher: Please remember: use as many complete sentences as possible; express your thoughts fully so that we can read it and understand it.

Student 1: This can be—no, this is a circle right?

Student 2: Yeah.

Student 3: I'll try triangles for examples.

Teacher: All right, so now what we're going to do is you're going to share your knowledge with the other group. This table here, they're experts on polygons. They're going to share what they learned with this table here—who's experts on congruent triangles—with this table here.

But we're going to do it in small settings, and we're going to kind of rotate around the room. So, each of you will get a card and it has a number, and that's going to tell you where to go. And again, the reason we're doing it in small settings is 'cause I don't want anybody to be nervous; I don't want anybody to be shy about asking questions if they don't understand, about explaining things that they don't understand. It's okay if you don't. You know that's why we're here, to learn it, to understand it. All right? So, the way it can start off is, first, I just want everybody to go to your poster. So you guys will go to your poster, you'll go to your poster. Hold on. Go to your poster, and then just look up here, and I'll give you guys the next steps. Questions?

Student 1: No.

Teacher: Let me see the threes. Who has a three? Okay, three: Wes, Matthew, Carlo.

All right, if you're a three, you're going to stay where you are. If you don't have three, you're going to rotate in this direction. Once you switch, the three is going to explain the poster. He's going to look at the definition; he's going to explain to you the examples—why are they examples, what are they non-examples, and the characteristics. And it should take a couple minutes, and then we'll rotate again. So, threes stay, everybody else just go kind counter-clockwise.

Student 1: So the definition is similar triangle, triangle . . . three-sided figure. The definition, they are not the same size, but they have the same shape. And they are proportional, and *las características*—they have equal corresponding angles and proportional corresponding sides.

Student 2: Same shape?

[Spanish dialogue with subtitles]