

THE COMPLEXITY SCALE

A routine creating multi-dimensional mental models

1. Say some broad things you know about a topic –observations, facts, ideas. Think up different *kinds* of things.
2. Place each statement somewhere on the complexity scale
3. Explain why you want to place it there.*

Simple _____ **Complex**

4. Reflect: What new insights and questions do you have about the topic?

*Feel free to discuss and debate placement. You can even place a statement in more than one spot on the line (sometimes things are simple in one way, but complex in another).

WHAT KIND OF THINKING DOES THIS ROUTINE ENCOURAGE?

This routine helps students build a more multi-dimensional mental model of a topic by identifying different aspects of the topic and considering their complexity. The benefit of the routine consists mainly in the *reasoning* students do in order to choose and explain their ratings. Of less importance is assigning each idea to the “right” place on the complexity scale.

WHEN AND WHERE CAN IT BE USED?

Use the Complexity Scale when you have been studying a topic for a while and students know something about it. But don’t wait until the end of topic to use the routine. The Complexity Scale is a good way to surface students’ conceptions so you can get a sense of how they are understanding the topic in its entirety.

WHAT ARE SOME TIPS FOR STARTING AND USING THIS ROUTINE?

This routine works well in a large group, but you can also use it in small groups or even solo. Almost any fact, observation or an idea about a topic that students think of can be placed on the scale. So all students should be able to participate. The essence of the routine is in the thinking and discussion it generates, so make sure to encourage students to discuss their ideas about where to place items on the scale. If students seem to default to thinking of complex as only hard or difficult, encourage them to think of other things that are layered, intricate, or complicated.

You can record students’ ideas yourself, or students can place them on the scale themselves. (Sticky notes work great here because they can be moved around when students’ ideas about placement change). Conclude the activity by asking students what new insights and questions they have about the topic.

Once your students are familiar with the routine, you can use the basic idea of complexity-rating in the context of regular class discussions, as a way of probing an aspect of a topic that you think is worth examining. For instance, you can ask: *Where would you place this idea/fact/event on the complexity scale.*