

Explaining and Modeling Content

Overview of explaining and modeling content

Explaining and modeling are practices for making a wide variety of topics, academic practices, and strategies explicit to students. Teachers determine when explaining or modeling can help to make explicit content and practices that often remain tacit or invisible. Teachers might use simple explanations when working with straightforward content. They might choose modeling, which includes verbal explanation as well as thinking aloud and demonstrating when sharing the metacognitive process, to provide greater access to students about strategies and practices.

Advancing justice through explaining and modeling content

Explaining and modeling content makes visible strategies, processes, and practices that may remain hidden to some students. Access to the kinds of knowledge most valued by and represented in traditional school settings is differentially distributed across lines of race and class. Making this content explicit by explaining, demonstrating, and modeling is critical to ensuring access to these skills across a range of learners. However, modeling can also convey low expectations of students and impede students' opportunities to make sense of content themselves. Teachers make judgments about whether and when to model specific content or practices, and ensure that students are supported and also have opportunities to think on their own.



Decomposition of modeling

Table 1: Areas of Work and Techniques for Modeling

Areas of work for modeling	Techniques for modeling
Planning to model	Evaluating: Decide whether modeling is appropriate in terms of the specific content and student learning. Selecting: Choose the content, practice, or strategy to be modeled. Selecting: Choose strategic examples and appropriate representations.
Framing	Connecting: Link ideas that are about to be shared to other topics or experiences (e.g., to previous learning, work, or trends). Locating the work in the trajectory: Explain the purpose of the content about to be modeled, which may include stating what is already known and what needs to be determined and/or stating the ways content being modeled is typically used in the content area. Closing: Reinforce the purpose of the modeling OR recap the key points of the modeling, and emphasize the result of the modeling.
Doing the content area work	Demonstrating: Work through the content, practice, or strategy in real time in front of students.



Areas of work for modeling	Techniques for modeling
Highlighting core ideas	Backgrounding: Avoid highlighting aspects of the content or task that are distracting or may lead to misconceptions. Foregrounding: Use explicit verbal markers to draw students' attention to important aspects of the content or the work (e.g., "Watch as..." "First ... then...") and elaborate and emphasize the part of the explanation that is most complex or confusing. Marking: Highlight or draw attention to important ideas by naming key elements while progressing in a logical fashion and being careful not to skip any elements.
Making thinking visible by emphasizing thinking and key elements	Annotating: Add or fill in ideas necessary to support students' understanding, including clearly articulating what you are doing and why you are doing it. Marking metacognition: Use markers (verbal, tone, or visual) to indicate when thinking is being made visible. Thinking aloud: Make appropriate thinking visible through narration.
Using language and representations carefully	Connecting representations: Make explicit correspondences between the problem, the text or task, the verbal/written explanation, and any representations. Using consistent verbal and visual representations: Use content-specific terms and representations clearly, concisely, and consistently throughout the modeling and use language and representations that are developmentally appropriate and accessible to learners. Defining content terminology: Use and define terms related to the content being modeled. Recording and representing: Translate verbal ideas into a visual form in the public space in ways that are likely to support student understanding, are clearly labeled, and are accurate. Use and explain (if necessary) representations that illustrate your thinking and record the process used.



Visual representation of modeling content

Planning to model	Active modeling		
- Determining whether modeling is an appropriate strategy - Selecting content to be modeled - Choosing strategic examples and appropriate representations	Framing	Doing the content area work	Closing
		Highlighting core ideas	
		Making thinking visible by emphasizing thinking and key elements	
		Using language and representations carefully	

