

Critical Teaching Skills for Presenting Information

INTASC Standard #8: Instructional Strategies

LEARNING OBJECTIVES

After reading this chapter, you should be able to:

- 5-1** Describe components of explanations and strategies for responding to diversity (skill, language, and cultural) when giving explanations.
- 5-2** Describe types of demonstrations, key ideas for conducting them, and strategies for responding to skill diversity when demonstrating.
- 5-3** Describe categories of visual supports and how to respond to skill diversity when using them.
- 5-4** Define *academic language*, explain decisions needed for planning to teach key terms and definitions, and give strategies for teaching key terms and definitions to English language learners.
- 5-5** Explain strategies for making directions clear, and explain how to respond to diversity when giving directions.
- 5-6** Describe general tips for planning effective presentations.

CHAPTER OUTLINE

5-1 PROVIDING EXPLANATIONS

- 5-1a** Components of Explanations
- 5-1b** Responding to Skill Diversity
- 5-1c** Responding to English Language Learners
- 5-1d** Responding to Cultural Diversity

5-2 GIVING DEMONSTRATIONS

- 5-2a** Types of Demonstrations
- 5-2b** Responding to Skill Diversity

5-3 USING VISUAL SUPPORTS

- 5-3a** Categories of Visual Supports
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5-4 TEACHING KEY TERMS AND VOCABULARY

- 5-4a** Academic Language
- 5-4b** Decision Steps for Planning to Teach Key Terms and Vocabulary
- 5-4c** Strategies for Defining Words
- 5-4d** IES Practice Guide Recommendations for English Language Learners

5-5 GIVING DIRECTIONS

- 5-5a** Making Directions Clear
- 5-5b** Responding to Diversity

5-6 GENERAL TIPS FOR PLANNING EFFECTIVE PRESENTATIONS



Introduction

This chapter is about critical teaching skills that are needed in order to present information clearly. A thorough content analysis (see Chapter 1) will tell you *what* you need to present; you also need to plan *how* to present it effectively. The skills introduced here have to do with what the teacher actually says and/or does with the content being taught—that is, explaining, demonstrating, using visual supports, and clarifying key terms and vocabulary. Giving clear directions is also included here because the techniques used to make directions clear are very

similar to those that make content presentations clear. Clarity of directions affects overall lesson or activity clarity, and because so many directions are given throughout a day, it is important to know how to give them effectively.

Read about the lesson Ms. Vandermay is planning to teach her students about the scientific method in Teachers in Action 5.1. Then, as you read this chapter, think about which critical teaching skills for making clear presentations would be effective at various parts of the lesson.

TEACHERS IN ACTION 5.1: A LOOK AT MS. VANDERMAY'S PLANNING

Ms. Vandermay is planning a series of lessons and activities for teaching students about the scientific method. The longer-term objective for this series is for students to apply the scientific method—that is, to test various original hypotheses. Ms. Vandermay has already taught a lesson that explained what the scientific method is and why it is important, which served as an overall introduction to the lesson and activity series. The lesson she is currently planning begins a study of the individual steps in the scientific method (question, research, hypothesize, experiment, analyze data, communicate results). The short-term objective is that students will *identify* good examples of each step so that they can learn in future lessons to *produce* such examples. She recognizes that if students are to apply the steps to a variety of questions or problems later on, they will need to have a very thorough understanding of each one. This means that she must teach clearly and completely. In order to do so, Ms. Vandermay plans to explain each step and demonstrate each one as well, using products and processes as appropriate. She will then have students practice identifying examples of each step as she presents new examples and nonexamples of each. During this lesson, she will also provide some initial opportunities for students to practice memorizing the steps so that naming them will eventually become automatic.

be learned. A thorough and easy-to-follow explanation has a strong positive effect on learning. As a teacher, you will be explaining facts, ideas, rules, strategies, processes, concepts, principles, and so on. You will use explanations as part of almost all activities and lessons.

5-1a Components of Explanations

There are many possible components of good explanations. Choose which ones to use depending on what you're explaining—whether it's a concept, fact, or strategy; how complex the information is; how concrete or abstract it is; and/or how familiar students are with the information. Supplement verbal explanations with the use of visual supports such as written steps and key ideas, study guides, and graphic organizers because their use can help make explanations easier to understand. Demonstrations are very helpful as well. (See more information about visual supports and demonstrations in Sections 5-2 and 5-3.)

Recommendation 3 of the Institute of Education Sciences (IES) Practice Guide *Organizing Instruction and Study to Improve Student Learning* is to “combine graphics with verbal descriptions” (Pashler et al. 2007). It is recommended that when teaching students about processes and procedures that can be well represented through pictures, figures, charts, video clips, or other graphic formats, teachers should combine verbal description of the key steps in a process with graphical representations that illustrate these steps. The IES panel maintains that the level of support for this recommendation is moderate.

A clear and complete explanation itself, however, might include some of the following:

5-1 Providing Explanations

One of the hallmarks of an effective teacher is being skilled at giving clear explanations. **Explanations** are what the teacher says about the information to

- *Paraphrases.* Use different words in phrases and sentences (finding the main idea is figuring out the most important thing the author is trying to tell you).
- *Definitions.* Tell what a word or term means (setting means where and when the story takes place).
- *Descriptions.* Tell about something, such as what it looks like or sounds like (a desert is hot, dry, and sandy).
- *Elaborations.* Give more details, more information (deserts receive less than 10 inches of rain a year, sometimes much less).
- *Synonyms or antonyms.* Tell another word that means the same or opposite (setting = location and time).
- *Characteristics or attributes.* Tell the special qualities, features, or properties that make it what it is (a characteristic or attribute of a triangle is that it has three sides).
- *Examples and nonexamples.* Presenting instances of what something is and/or what it is not (“Treasure Island” is a proper noun because it is a specific island, whereas “island” is not a proper noun because it is not specific).
- *Connections to prior knowledge/personal experience.* Tell how it’s related to something they already know (rounding: If you are halfway or more across the street when the light changes, does it make sense to keep going, or turn around and go back?).
- *Comparisons.* Tell what it is like or not like. Use similes and metaphors (a setting is like a scene in a movie or play).
- *Categories.* Tell what it is an example of; tell about the big picture (Cinco de Mayo is an example of a celebration of a historical event).

Giving clear explanations can be accomplished by carefully selecting specific strategies to use, and the ideas just stated can be used in any combination. Their selection and use can be adjusted as dictated by student need. Remember Ms. Vandermay’s lesson on the scientific method? She planned to teach the steps of the scientific method so that, later on, students could set up effective experiments to test their hypotheses. See Teachers in Action 5.2 for some of her ideas for helping to explain the “ask a question”

step. She will use a similar procedure for presenting each step, making adjustments as appropriate.

TEACHERS IN ACTION 5.2: MS. VANDERMAY PLANS EXPLANATIONS

STRATEGIES PLANNED

Definition. Explain that “ask a question” is the first step in the scientific method; it comes as a result of observing something and formulating a question about what you observe; it is something you wonder about; questions are about the physical world or facts and have answers that can be discovered.

Elaboration. Explain that the question may begin with *how*, *what*, *when*, *who*, *which*, *why*, or *where*; after doing some research on the topic, the question may be used to construct a hypothesis; it’s something that can be measured; it’s something that can be tested.

Examples. Explain that the following are examples of appropriate questions: What makes a daisy change the position it faces throughout the day? Why don’t mosquitoes lay eggs in water with a current?

Reasoning. Ms. Vandermay chose several strategies in order to be very thorough in her explanations because students need to know details about each step of the scientific method. Application of the steps is only possible with a thorough understanding. By supplementing her definition through elaboration and examples, Ms. Vandermay considers her explanation complete enough to communicate the full meaning of each step.

What else could Ms. Vandermay do to make sure that her explanations are clear?

5-1b Responding to Skill Diversity

The following suggestions will provide support for students, including those with learning disabilities, in learning the information you present:

- Explain the whole idea, rule, strategy, concept, or principle as well as the component parts.
- Present information in smaller parts, and provide practice after each part.
- Increase opportunities for all students to be involved with the explanations being presented by using active participation strategies, responding to questions, encouraging discussion, and so forth.

- Use frequent checks for understanding.
- Use analogies, metaphors, and vivid language.
- Stop often to summarize, review, and clarify how this information fits into the larger picture.
- Pair all explanations with visual supports.
- Use classroom amplification (e.g., wireless microphone and speakers) when you explain orally.
- Provide partially filled-in note-taking guides or graphic organizers that students can complete (e.g., outlines, concept maps, or webs).
- Provide mnemonic devices and other memory supports to help students remember explanations.
- Adjust your rate of speech and the number of words you use; consider simplifying your syntax and vocabulary.
- Provide a note-taker for a student who has difficulty taking notes while listening.

5-1c Responding to English Language Learners

Some of the strategies previously mentioned are also helpful for English language learners (ELLs). For example, using visual supports, stopping frequently to check for understanding, and using culturally relevant examples can also benefit ELLs. Following are more ideas:

- Communicate meanings of new terms and concepts by using gestures, facial expressions, voice changes, pantomimes, demonstrations, rephrasing, visuals, props, manipulatives, and other cues (Salend and Salinas 2003).
- When you present, enunciate clearly, but don't raise your voice (Reed and Railsback 2003).
- Repetition can help students acquire the rhythm, pitch, volume, and tone of the new language (Salend and Salinas 2003).
- Don't speak too quickly, and use brief pauses at natural points to allow learners to process what they are hearing.
- It is important to write clearly and legibly. Print rather than use cursive until you are sure your ELLs can read cursive (Reed and Railsback 2003).

- Avoid idioms (*backseat driver*, *cute as a bug's ear*) and slang (*hangout*, *deep pockets*) because they can be confusing for ELLs (Reed and Railsback 2003).
- Summarize the important points of the presentation frequently (Reed and Railsback 2003).

5-1d Responding to Cultural Diversity

- Use culturally relevant examples (e.g., Urban students may not identify goats or rabbits as pets.).
- Students from various backgrounds may prefer listening quietly or call-and-response approaches.
- Allow for active physical responses to the presentation when students are used to that style.
- Emphasize the big picture; create a context for new information.

You can use many techniques to help you explain information in a way that engages students and increases their understanding. Over time, many of the available options become second nature. (See Teaching Plan 2 in the Appendix for examples.) One technique that will help your students learn to apply the information you are explaining is to keep naming or titling what you are explaining. For example, say, "In step three *of proofreading your writing*, checking punctuation means..." rather than just "In step three checking punctuation means..." In addition, using multiple methods of explaining, including saying the information and putting it in writing, will help make your presentations clear and focused. Employing the principles of universal design for learning (see Chapter 3) will make your explanations accessible to more students.

Teacher Checklist 5.1 may be used as a resource when planning explanations for your students.

TEACHER CHECKLIST 5.1: PROVIDING EXPLANATIONS

- ✓ Have I planned complete and accurate explanations of key ideas to be presented?
- ✓ Have I planned clear definitions of important ideas and ways to paraphrase them?
- ✓ Have I planned how to emphasize important characteristics or attributes of the content?

(Continued from previous page)

- ✓ Have I planned multiple congruent examples and nonexamples to help clarify my verbal explanations?
- ✓ Have I planned my explanations using language that all of my students will understand?
- ✓ Am I planning to repeat key ideas often, using the same wording?
- ✓ Am I planning to teach the content in a step-by-step, piece-by-piece manner?
- ✓ Am I planning ways/times to refer back to the main content idea?
- ✓ Do I have visual supports prepared that emphasize the key ideas I am teaching?
- ✓ Do I know how I will check for student understanding during my explanations?

✓ Professional Resource Download



- Model individual steps rather than all steps together in the initial stages of learning.
- Post relevant information for future reference.
- Use think-alouds where the teacher models her thought process.



TECH NOTE

You can create, or find on the Internet, video-based narrated demonstrations. They can be shown during your lesson, or you can ask students to look at them before the lesson on mobile devices or home computers. Unlike your “live” demonstrations, students can view them multiple times.

5-2a Types of Demonstrations

Teachers can use two types of demonstrations (see Figure 5.1). The first is a **demonstration of a product**. This means that the teacher shows the students a finished product or pieces of a finished product. For example, Ms. McElroy plans an activity where students make origami birds. Ms. McElroy prepares a model (product) of the bird at each step of completion (after each new fold). This allows her students to see what the bird should look like as it is being created as well as when it is finished.

The second type of demonstration is the **demonstration of a process**. This is when the teacher shows the students how to do the steps of the task. Here, Ms. McElroy completes each step of creating the origami bird while her students watch. She carefully explains what she is doing as she does it—for example, “Now I fold the paper across the diagonal and line up the edges of the paper so that they match exactly.” Role-plays and skits can also be used as demonstrations of a process. For example, Mr. Weston acts out how students are to get under their desks during an earthquake drill. (See Teaching Plan 1 for other examples of modeling.) Often, teachers will use both a demonstration of process and a demonstration of product. This, of course, will depend on the content of the lesson (see Teaching Plan 7 for examples of using both types).

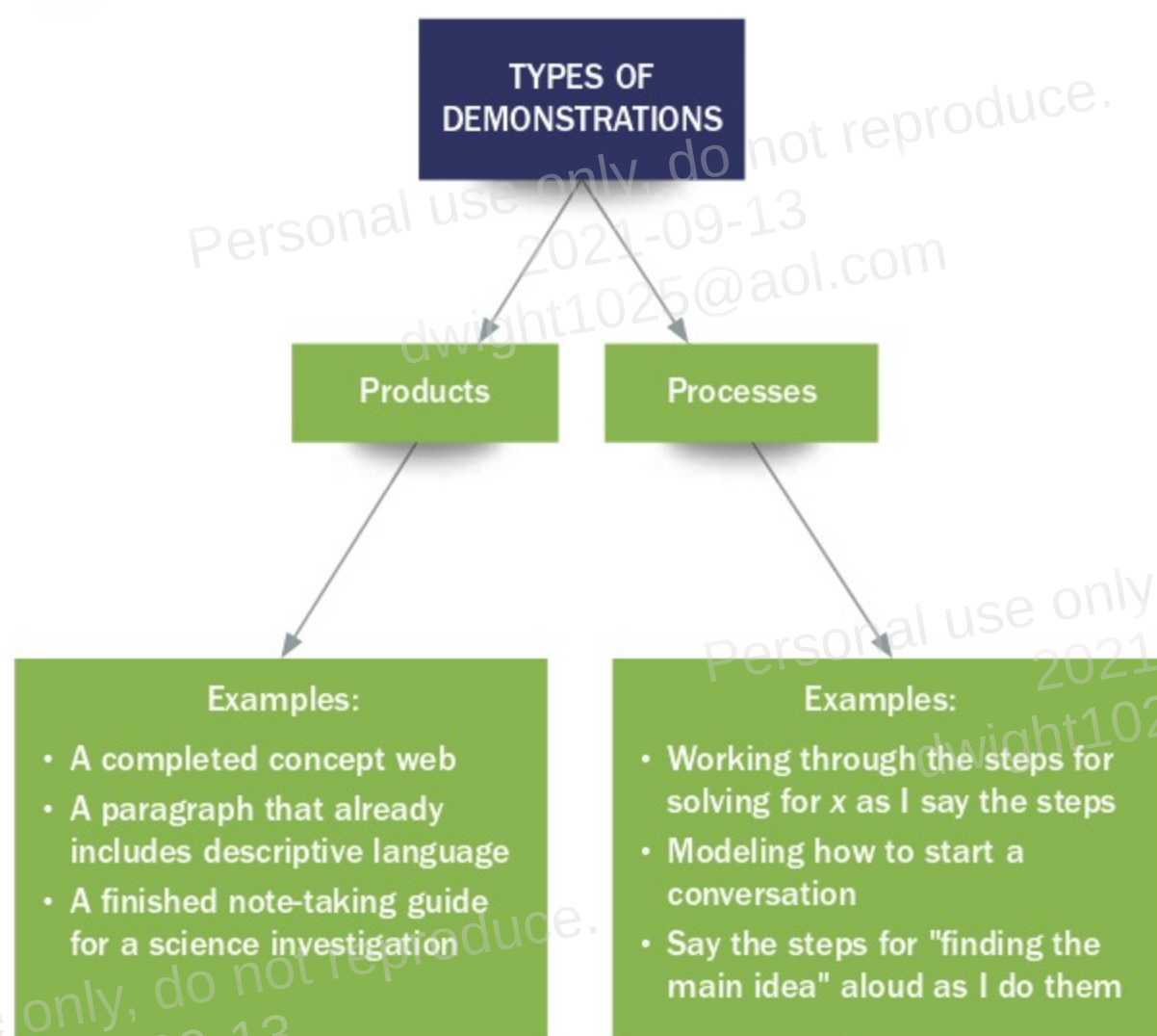
It is very important that the teacher or other expert does the demonstration in the initial phases of learning. This will help ensure that students get an accurate picture of the learning task. Demonstrations can be made even more effective by adding clear oral

5-2 Giving Demonstrations

In addition to explaining information, you will often also demonstrate or model information before, during, or after explanations, or sometimes both before *and* after. **Demonstration** or **modeling** is especially important when teaching how to do something, and it means showing the students what it is they are expected to do. When a teacher shows students how to do a computation skill by first doing it herself, she is offering a demonstration. When a teacher role-plays for his students how to respond to teasing, he is providing a model of how the expected skill should look. Effective demonstrations play a key role in helping students better understand what is being taught.

Recommendation 1b of the IES Practice Guide *Teaching Secondary Students to Write Effectively* (Graham 2016), is “use a model-practice-reflect instructional cycle to teach writing strategies.” The panel states there is strong evidence to support the use of this cycle. Specific suggestions for effective modeling include:

- Describe the learning task verbally while modeling.
- Show correct and incorrect examples for students to study.

Figure 5.1 Demonstrations

explanations as you do the demonstration. The following ideas may help when planning demonstrations:

- Actually act out the skill you are teaching, rather than just explaining and asking students to imagine what you want them to do. For example, when demonstrating the routine for entering class, you should walk to the coat hooks and hang up a real coat rather than saying, “Next, I would put my coat away” and pantomiming hanging up a coat.
- Use a think-aloud to explain what you are doing as you do it. For example, when teaching the steps of a proofreading strategy, say, “I’m looking at the sentences in my paragraph one sentence at a time to see if each has an end mark. Oh—my third sentence is missing an end mark!” Be explicit.
- Supplement the demonstration with other visual supports. For example, when demonstrating how to preview a chapter in a content area textbook, post the steps to follow and refer to them.
- Demonstrating the new skill or knowledge only once is generally not enough. For example, if you are teaching students to find the common denominator of fractions, let them watch you find the common denominator of several different pairs of fractions.

- Actively involve students in the demonstration as appropriate, being careful about not asking them to do the demonstration for you. For example, when teaching how to add two-digit numbers to two-digit numbers without regrouping, ask students to say the answers together.
- When teaching a complicated skill, demonstrate each individual step of the skill, and also demonstrate all steps together. For example, when teaching the routine for doing their daily math timings, show students how to do each part, then show students how to do the whole routine together.
- Rehearse your demonstration to ensure that it is clear, complete, and smooth. For example, practice demonstrating how to write the letter m on the board in such a way that all students can see and will be able to copy your movements.

5-2b Responding to Skill Diversity

Some suggestions for responding to skill diversity in your classroom are:

- Increase the number of demonstrations.
- Emphasize or highlight important parts or steps in demonstrations with words (“Look carefully

at what I do next...”) or with visual supports (highlighting key words in the list of steps written on the poster).

- Be sure to use consistent terms and phrasing when demonstrating with think-alouds.
- Point to the steps on a written list as they are demonstrated.
- Show video-recorded demonstrations of real applications.

A demonstration is an integral part of teaching information clearly and effectively. Teachers can use demonstrations before, during, or after explaining the information they teach. Sometimes, several demonstrations are included. Remember that it is important to actually do the demonstration rather than to simply tell how to do it. You can increase student understanding about the information being taught by giving effective demonstrations, along with clear explanations. Demonstrations are a type of visual support, but we have considered them separately because they are such an important part of presenting information. Remember Ms. Vandermay’s lesson on the scientific method? Teachers in Action 5.3 provides some of her ideas for planning the demonstration parts of that lesson.

TEACHERS IN ACTION 5.3: MS. VANDERMAY PLANS THE DEMONSTRATION

STRATEGIES PLANNED (FOR THE DATA ANALYSIS STEP)

Demonstration of a product. Show examples of data collections and related conclusions (displayed on charts and graphs) that have been collected and analyzed on previous experiments that students have done in science (e.g., how the slant of an inclined plane is related to its mechanical advantage; results from the “hours of sleep students get each night” survey.) Explain the data displayed on the charts and graphs—that is, what data are displayed, why the display works for the type of data, and so forth. Emphasize how the raw data were analyzed, how the data were summarized in a visual display, and how the conclusions were supported by the data.

Reasoning. The demonstration of product strategy was selected because it provided a concrete way to show clearly to students the various components of the data analysis step (raw data, summarized data, and conclusions). Not only did this approach provide clarity, but it also provided a display of

what the students’ final products for this step will look like. Finally, using data displays that students have worked with before provided valuable scaffolding between what they have done before and what they will do now; therefore, relevance in the information being taught was established.

How else could Ms. Vandermay use demonstrations (product, process) to help students learn each step?

5-3 Using Visual Supports

Using **visual supports** effectively is another critical teaching skill. Visual supports can increase the effectiveness of instruction by making information, explanations, and directions more comprehensible to learners. They are very helpful in teaching vocabulary, giving directions, building background knowledge, clarifying difficult concepts and strategies, and providing scaffolds for new learning. Although visual supports are important in all lessons and are helpful to almost everyone, they are absolutely essential for students who have difficulty learning or for ELLs. In the IES Practice Guide, *Teaching Academic Content and Literacy to English Learners in Elementary and Middle School* (Baker et al. 2014), the panel recommends that teachers “strategically use instructional tools—such as short videos, visuals, and graphic organizers—to anchor instruction and help students make sense of content.”

5-3a Categories of Visual Supports

The following four categories provide some idea of the broad range of visual supports from which to choose:

1. **Realia or pictures:** real objects, animals, people, working models, models, multimedia presentations, video recordings (including YouTube), computer graphics, photographs, drawings, or maps. Incorporating these as props in your instruction will help make new information more real and clear to students, especially when they can see, hear, and touch what they are learning about (see Photo 5.1).
 - **Example:** Ms. Walser wants her activity on making change to be interesting and relevant. She brings in food boxes and cans, as well as toy boxes. Each item is marked with a price. Students are given play money and count back change for various items.



Photo 5.1 A poster may be used as a visual support during a lesson.

2. *Actions: gestures, demonstrations, or role-plays.* These are especially helpful in teaching procedures and behavioral skills.

- *Example:* Ms. Gumley shows students how to use a proofreading strategy: “First, I underline the first letter in each of my sentences. I’m looking to see that each sentence starts with a capital letter.” Ms. Gumley actually circles, underlines, crosses out, and writes changes directly into written work along with saying out loud the steps of the proofreading strategy.

3. *Writings:* on posters, an interactive whiteboard, a document camera, PowerPoint slides, handouts, labels, books, magazines, sketches, newspapers, and computer text. Providing information in writing so students can read it as well as hear the teacher speak it is very helpful to many learners.

- *Example:* Mrs. McGee prepares a PowerPoint slide that shows the directions needed in order to complete the writing assignment.

4. *Graphic organizers:* outlines, concept maps, diagrams, webs, T-charts, story maps, word banks, Venn diagrams, compare and contrast charts, problem–solution–effect charts, note-taking guides, and so on. These are used to depict connections and relationships among ideas. Show graphics during instruction, or ask students to fill them in as part of brainstorming, during presentations, while reading, with peer partners or in groups, and as practice or evaluation activities.

- *Example:* When teaching about different forms of government, Ms. Branham uses a compare/contrast map to illustrate the ways in which a democracy and a dictatorship are the same and different.

Some graphic organizers serve several purposes. For example, teachers can use a concept map to help them explain information. This is especially helpful when explaining difficult or complex content. On the other hand, when teachers have students create these concept maps, students not only demonstrate their knowledge of the content, but also show how they view the relationships within the content (Campbell 2016).



TECH NOTE

Visual organizers are one type of visual support that is frequently used in classrooms in a variety of content areas. There are many programs, apps, and web-based services that provide options for this type of visual.

- **Computer programs**
 - Inspiration (Mac and PC)
 - Draft: Builder (Mac and PC)
- **Apps**
 - Inspiration Maps (iPhone and iPad)
 - MindMash (iPhone and iPad)
 - Graphic Organizer (iPhone and iPad)
- **Web-based services**
 - Popplet (also available as an app for iPhone and iPad)
 - Mindomo (also available as an app for iPhone, iPad, and Android devices)

Various visual supports can be combined during instruction. For example, when teaching students how to put together a completed circuit, the teacher can demonstrate using real objects and provide written directions with diagrams, as well as giving directions orally. The important idea is that seeing something, in addition to hearing about it, can greatly enhance learning.

5-3b Responding to Skill Diversity

Some of the ways you can respond to diversity in your classroom when planning visual supports are:

- Increase the number of visual supports used.
- When using writings as visual supports, help students (including ELLs) read and comprehend.

- Use visual prompts (e.g., color-coding) to highlight essential information.
- Provide individual copies of the visual support (such as checklists of steps to follow for getting help) for students to have at their desks.
- Use pictures to supplement written words on a visual support. For example, include picture cues for behavior expectations written on a poster so that students can read and see what is expected.

Many sources for visual supports are available. They can be ordered from catalogs or borrowed from libraries, museums, and universities. Teachers can make files of photographs and drawings and collect objects from garage sales. They can bookmark Internet sites and put photos, drawings, and diagrams on slides or display them with a document camera. Computer software and the Internet have greatly expanded what is available to teachers. A visual support library can be a very valuable asset for teachers in any content area.

The importance of visual supports cannot be stressed enough. Visual supports can help teachers increase interest in the content they are teaching and can help students “see the big picture” and organize information for learning. They can also make the difference between a lesson or activity that is understood and one that is not. Think carefully about appropriate visual supports as you plan lessons and activities. Think again about Ms. Vandermay’s lesson on the scientific method. Look at Teachers in Action 5.4 to see some of the visual supports she plans to use to help promote student learning. (Go to the Teaching Plans in the Appendix for more examples.)

TEACHERS IN ACTION 5.4: MS. VANDERMAY PLANS FOR VISUAL SUPPORTS

VISUAL SUPPORTS PLANNED

PowerPoint slide presentation. Each slide will include the name of the step and a few important words to help students remember what it means will flash across the screen.

Poster of lesson objective. The poster will be left up during the whole lesson.

Photographs. She will use photos of examples (such as time-lapse photography of a flower face changing position throughout the day).

Reasoning. Ms. Vandermay thinks that the slides will create interest, and important words for each step will help with memorization. Keeping the poster on display gives ongoing opportunities to refer to the poster while emphasizing each step. Photographs will create interest and ensure clarity of examples.

What other visual supports could Ms. Vandermay use to strengthen her lesson presentation?

5-4 Teaching Key Terms and Vocabulary

In addition to explaining and demonstrating ideas with the support of visuals, it is critical to teach the terms and vocabulary important to understanding and expressing those ideas. The learning of grade-appropriate vocabulary is necessary for all students; it is emphasized in the Common Core State Standards and is, of course, essential for English language learners.

Our primary focus here is on teaching words in the context of a lesson or activity, not on stand-alone vocabulary lessons. For example, if you are teaching a science lesson on the water cycle, you’ll need to teach the terms *evaporate* and *condense*. You may also decide to teach the word *cycle* because it’s an important word in this lesson, in science, and in other content areas. As you see, teaching key terms and vocabulary begins with an understanding of what words are important to teach. The concept of *academic language* is helpful here.

5-4a Academic Language

Academic language may be roughly defined as the school language used for learning; that is, for understanding and expressing complex ideas. Nagy and Townsend (2012) refer to academic language as “the specialized language, both oral and written, of academic settings that facilitates communication and thinking about disciplinary content.” Hill and Miller (2013) add that “academic language is language used at school and

characterized by longer, more complex sentences that contain vocabulary less frequently heard than the vocabulary in everyday spoken English.” That makes academic language quite different from the more common everyday words that students use, making it important to teach this language directly. Lessons and activities on any topic provide an opportunity to build students’ academic language skills. One part of this is directly teaching the words needed for understanding a particular lesson or activity. These may include two types of **academic vocabulary**.

Key terms—also called domain-specific vocabulary—are unique to a content area. These are the technical or specialized terms used in academic disciplines, such as math, science, and history. These terms usually have no exact substitute, and the definition is one that is generally agreed upon by experts in the content area. Key terms are the words likely to be highlighted in textbooks and digital materials and to be defined in the glossary. Some examples are *linear measurement*, *quotient*, *fossil*, *topography*, *syllable*, *constitutional*, *chronological order*, *foreshadowing*, *photosynthesis*, *condensation*, and *landform*.

Academic vocabulary also includes **general academic vocabulary** words. These are words that students are unlikely to hear or use in everyday, social situations although they sometimes have a common meaning as well as an academic meaning. This vocabulary is used across content areas rather than being specific to one discipline. These are words and phrases used in teacher presentations, textbooks, questions, assignments, and tests, and that students will need to use when discussing and writing. Some examples are *compare and contrast*, *community*, *estimate*, *infer*, *provide evidence for*, *assess*, *role*, *task*, and *conclude*. A source of academic vocabulary words is *The Academic Word List* (Coxhead 2000) available online.

The labels *bricks* and *mortar* may help to differentiate between these two components of academic language (Dutro and Moran 2003). *Mortar* (general academic vocabulary) sticks *bricks* (specific academic terms) together to build understanding. Sometimes, teachers collaborate to prioritize academic terms and vocabulary to teach across grade levels and content areas. This helps provide the repeated exposure to terms and vocabulary needed for deep understanding.

Nonacademic vocabulary may also be taught as part of lessons and activities. *Basic* vocabulary words are words familiar to most kids and used in ordinary, daily communication. They are usually learned indirectly, but high-utility basic vocabulary words may need to be directly taught to language learners with low English proficiency, to students less exposed to language at home, or to students with learning or cognitive disabilities. When stories/literature are part of the lesson/activity, students may encounter more *sophisticated*, nonacademic vocabulary that will need to be taught to support reading or listening comprehension (see Photo 5.2). Additionally, in some lessons/activities, students may benefit from being directly taught words to help make their writing more precise and vivid. Examples of nonacademic vocabulary words are *meandering*, *amiable*, *squat*, *outraged*, *vast*, *smudge*, *shrewd*, *fantasy*, *footloose*, and *startled*.

The labels *tier 1* for basic vocabulary, *tier 2* for general academic vocabulary (sophisticated), and *tier 3* for content-specific vocabulary (Beck, McKeown, and Kucan 2002) are also used to describe the various types or levels of vocabulary needed in school. As you plan for teaching these key terms and vocabulary, you’ll need to make various decisions.

5-4b Decision Steps for Planning to Teach Key Terms and Vocabulary

There are four decision points or steps through which a teacher works as he plans for teaching key terms and vocabulary. These decisions are much



Photo 5.2 This teacher pre-teaches vocabulary words that will be used in the story he is about to read. He uses a visual support as well.