

Figure 1.1. Qualities of Prior Knowledge That Help or Hinder Learning

## Methods to Address Insufficient Prior Knowledge

Identify the Prior Knowledge You Expect Students to Have The first step toward addressing gaps in students' prior knowledge is recognizing where those gaps are. This requires identifying in your own mind the knowledge students will need to have to perform effectively in your course. To identify what the prior knowledge requirements are for your class, you might want to begin by thinking about your assignments, and ask yourself, "What do students need to know to be able to do this?" Often instructors stop short of identifying all the background knowledge students need, so be sure to continue asking the question until you have fully identified the knowledge requirements for the tasks you have assigned. Be sure to differentiate declarative (knowing what and knowing why) from procedural knowledge (knowing how and knowing when), recognizing that just because students know facts or concepts does not mean they will know how to use them, and just because students know how to perform procedures does not mean that they understand what they are doing or why. (See "Strategies to Expose and Reinforce Component Skills" in Chapter Four.)