

SETTING PRIORITIES WITH FACT PYRAMIDS

“If you remember only one thing about this, it ought to be . . .”

For many of our students, the remembering of one thing about a unit, a chapter, or a lesson would be a tall order. Unfortunately, many students seem to conceptualize learning in school as a short-term process. They see their classes only as a steady barrage of information, and they cope by trying to remember only long enough to pass a test. Teachers find it discouraging that so many of our students seem to retain so little of what they supposedly “learned” in school.

The Forest and Acres and Acres of Trees.

One reason students seem so readily disposed to quickly forget much of the information they encounter in school is due to the nature of the material itself. Textbooks are often poorly organized and do not satisfactorily cue students as to how to maneuver through all the factual information so that it makes sense. Textbooks tend to be written to expose students to information rather than to help them truly understand it.

Thus, “school” for many students is construed as an overwhelming load of factual information which never gets sorted out into something useful and worth remembering. The old adage that they “can’t see the forest for the trees” becomes a daily occurrence for students immersed in the factual detail of their textbooks. As a consequence, activities and questions which guide students into sorting through factual information and making meaningful connections will more likely lead to the kind of long-term associations that makes learning memorable.

Prioritizing Factual Information.

How can student activities be structured so that real learning takes place, so that a true conceptual change occurs in the mind, so that important information is retained over time and not merely long enough to pass tests? Classroom strategies which guide students into making connections between their background knowledge and what they are studying in class will increase the probability that the new information will find a place in long-term memory.

Imagine the following scenario: five years from now, as you walk along the street, you meet one of the students you are currently teaching. What should this person still remember from your class? You know that much of the specific information the student had encountered will be forgotten. But what has to still be there, or you’ll be bitterly disappointed? What does this former student need to remember about the New Deal, or cell division, or congruent triangles, or *To Kill a Mockingbird*? To ask it in another way, did this former student “get the point” from these various units of instruction?

It is unlikely that you would be crestfallen if your former student could not name the provisions of the National Industrial Recovery Act or identify Henry Wallace, as long as he or she recognized the New Deal as an extensive governmental reaction to the Great Depression that included support for American citizens. Likewise, you probably would not expect your former student to name the various stages of mitosis, or recall specific theorems. You would, however, expect a basic understanding that cells divide as an explanation of growth of living organisms and you would hope for an internalization of the basic principles of triangles, such as the relationship between angles.

Essentially, then, you would concede that some factual information will in all likelihood be forgotten over time, but that other, more transcendent information must be remembered if one is to be regarded as a literate person. Fact

Pyramids (Buehl, 1991) provide teachers with a structured way of analyzing information so that our teaching will guide students' focus toward big ideas--those few facts and concepts that we truly want students to remember over time. Fact Pyramids graphically categorize text information into three levels: (1) essential facts; (2) short-term facts; and (3) supportive detail (see Figure 1).

Essential facts are those concepts or ideas that one would expect a literate person to know over time. If you remember only one thing about a lesson or unit, this is it. They represent the "point" of the lesson.

Short-term facts comprise the necessary information that allows concepts to be learned with some level of sophistication, but they will generally be forgotten over time. These facts make up much of the language of class discussion and instruction, the key vocabulary and major details, but ultimately they are not important as ends in themselves. Students use short-term facts to construct a deeper understanding of a concept or idea.

Supportive detail represents the more specific information which provides the depth to flesh out an understanding but which does not need to be learned for its own sake. Supportive detail comprises the "semantic glue" for a text, the elaborations and examples that help to illuminate understanding.

Integrating Fact Pyramids Into Your Teaching.

Using the concept of Fact Pyramids can help teachers make decisions about which teaching strategies can best differentiate among the types of information delivered in a chapter. By categorizing information in terms of these three levels, teachers can identify shortcomings with a textbook's organization and questions. Are the elements of the text that you regard as essential readily apparent to your students? Or will your

students have to "dig" for them? Will students become overwhelmed by the factual information without ever really realizing the "point" of the material?

The questions for student learning provided in textbooks are typically guilty of diverting student attention away from essential concepts. Unfortunately, many textbook questions ask students to focus on supportive detail information. For example, the following question in a United States History textbook involves students in processing

supportive detail to complete the assignment:

Identify the following:

- (a) Benjamin Wade, (b) Henry Davis,
- (c) John Wilkes Booth, (d) Thaddeus Stevens, and (e) Charles Sumner.

Such a question sends a wrong message to students. First, they are led to believe that because a name was mentioned in the text, it is worthy of attention. John Wilkes Booth, the assassin of Abraham Lincoln, is well-known, but most literate adults would not be able to identify the other people on this list. Second, all of the above people are treated as equally important. Students are given no direction in evaluating which information is most deserving of attention. Third, students know they will forget these people within a short period of time, and they begin to regard all information that they encounter in history, for example, as equally forgettable.

Instead, a Fact Pyramid constructed for the post Civil War period might help clarify which text information is actually worth asking students to write about (see Figure 2, next page). A history teacher might decide on the following *essential facts* for this period of study: "Reconstruction was a federal government action to monitor bringing the Southern states back into the union," "black codes were passed to deny the newly freed slaves their rights," and "disagreements over Reconstruction led to the

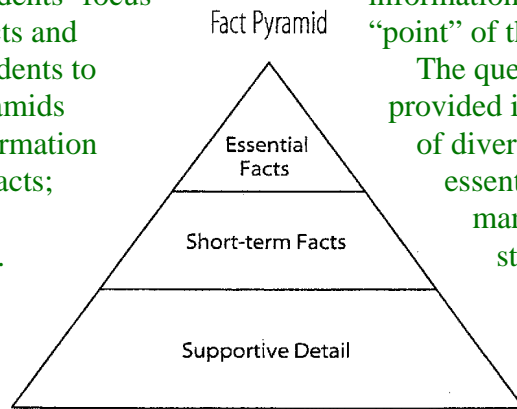


Figure 1

impeachment of a President.” This information should receive primary focus in text questions.

Short-term facts for this unit might include the major players in this controversy, President Andrew Johnson and the Radical Republicans. The major provisions of the Reconstruction Act of 1867 will probably become hazy for most students over time, but a sense that the federal government controlled the Southern states (through use of troops) will perhaps remain. Although many students will forget which amendment did what, most should realize that Constitutional amendments abolished slavery and guaranteed “due process.”

Finally, specific information about people such as Benjamin Wade or Charles Sumner, or

pieces of legislation such as the Tenure of Office Act, represent *supportive detail* useful only to broaden and enrich the understanding of major ideas of this unit. Few adults would be able to successfully identify most of this information. Direct questions on supportive detail information should thus be avoided

Fact Pyramids are constructed by teachers to spotlight what is important and worthy of being remembered over time. They allow teachers to adapt their textbooks and target questions which do help students to be selective and

get the point (the “tip” of the pyramid). They lead to using teaching strategies that engage students in successfully handling material that contains a wealth of detail.

Fact Pyramid on Reconstruction

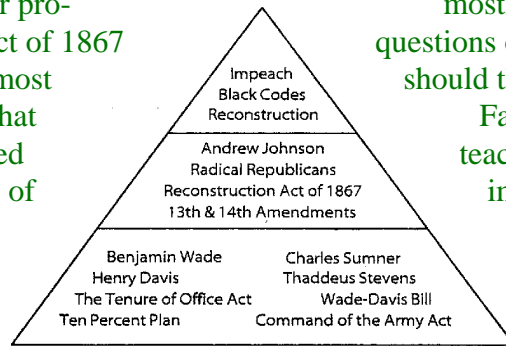


Figure 2

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