Concepts are some of the most powerful components of learning and content mastery. In fact, concepts attainment is necessary for deep understanding. If your students don't grasp the concept, they don't really understand what you are trying to teach. This is a challenge in teaching in part because most students do not recognize a concept when they see it (and novice teachers often don't either). Further, concepts are abstract and therefore hard to grasp. And yet, the most important things we try to teach, what is referred to as "enduring understandings," is comprised of abstract concepts.

What is a concept?

Concepts consist of a category (sometimes called a class or a set) and the attributes by which to tell whether or not an object belongs in the category. Concepts, then, require the ability to build taxonomies. Students must discern likeness and difference, identify qualities, and name or create categories. No small feat for any learner, yet we've all been doing this cognitive feat since we were young children, and it remains a fundamental way we learn all through life.

The Procedure for Teaching a Concept

The best procedure to follow when teaching a concept is:

1. Name the concept
2. Define the concept
3. Explicate the concept
4. Provide an example of the concept
5. Provide a non-example of the concept
6. Identify criterial attributes of the concept
7. Test for comprehension.

It’s quite amazing, but, if we follow this procedure learners are better able to acquire an understanding of a concept than if we try it any other way. Often it is in step three, that we fall into the trap of teaching misunderstandings. For example, using metaphors as explanation (rather than illustration).

The genius of this powerful procedure is that you can apply it in five minutes, or, design an entire period or unit around it. You can use the procedure to introduce the concept for your lesson during the first five minutes of your class. Or, you can use the procedure as a scaffold for an entire unit of study, with each step as a student learning activity.

Other common misunderstandings involve offering anthropomorphic ("The Bible says . . . " "History tells us . . ."), ontological (a failure to differentiate cause from end), or normative ("Because that’s the rule . . .", "God said it, I believe it, that settles it" or appealing to uncritical self-evident norms) explications when teaching concepts.

Avoiding teaching misunderstanding requires we do the hard work of developing an accurate understanding of what we are trying to teach. Steps 4, 5, and 6 are the ones that help facilitate the process of acquiring an accurate understanding (going from the known to the unknown, building taxonomies, sharpening identification of occurrence, etc.). Here is a simple test: before trying to teach a concept try explaining it to someone else (1) simply, and (2) accurately. Preferably, you should have a young child around to experiment on.

With complex concepts students will need more process time to gain a deep, nuanced, and accurate understanding. Complex concepts may require multiple facets of exploration, practice, and application.

Step seven is critical. Learners are notorious for being able to explain a concept without fully understanding it. Students get adept at mimicking teacher explications or learning to give back what you, the teacher, said while bypassing all of the necessary processes that result in actually understanding.

Unfortunately much of what consists of testing for understanding in schooling is assessing whether or not the student can explain it like the teacher did, rather than assessing understanding. Meaning, your students can get 100% "correct" on a test and still not have
learned anything.

When you teach a concept follow the correct procedure outlined and you will help your students acquire a deeper understanding of the concept while avoiding misunderstanding.

https://www.wabashcenter.wabash.edu/2020/01/teaching-concepts/