Never Forget an Idea Again with The Feynman Technique

Richard Feynman was a Nobel-prize winning physicist. He tells a story of going into the mathematics department and challenging anyone there to explain to him any idea, no matter how difficult or complicated, and as long as they used simple terminology (no complicated words or terms he didn't understand), he would reach the same conclusions that they did.

This story is often brought up to show what a great genius Richard Feynman was. But in reality, anyone can do this technique, and I'm going to show you how.

You can use the Feynman Technique to:

1. Understand ideas that you don't really "get".
2. To remember ideas that you can understand, but forget on tests.
3. As a really efficient way of studying before an exam. Many students spend hours in the library to lousy results. You can use this technique to deeply understand an idea in 20 minutes, that will stick with you for years.

Let's walk through the Feynman technique, so you can use it in your own studies to learn better.

Step One: Choose Your Concept

The first step is to choose the concept you want to understand. Take a blank piece of paper and write the name of that concept at the top of the page.

Step Two: Pretend You're Teaching the Idea to a New Student

The second step is to write out an explanation, as if you were teaching it to someone who didn't understand the subject. This is crucial because in explaining to yourself the ideas you already understand, as well as the ones you don't, you gain a better understanding and pinpoint exactly the details you don't understand.

Step Three: Whenever You Get Stuck, Go Back to the Book

Whenever you get stuck, go back to the reference materials, lectures or a teacher assistant and re-read or re-learn the material until you do get it enough that you can explain it on the paper.

Step Four: Simplify and Create Analogies

Wherever you create a wordy or confusing explanation, try to either simplify the language, or create an analogy to understand it better.

You'll notice I did both of these in this quick demonstration. I simplified the language of torque, to explain it in terms of twisting. Second, I was able to describe it through analogy, by taking the torque vector and describing it as a corkscrew motion, tightening with right or loosening with left.

Here are some examples of this technique that I used in an actual class, learning physics:

http://www.scotthyoung.com/mit/801-notes.pdf

You can use this technique for understanding mathematical or technical classes, carefully walking through the steps and explaining it to yourself.

But you can also use this technique in non-technical classes to understand big ideas, or even to put together a large amount of facts in the same place, so you can understand them in context.

How can you use this technique?

If you're trying to *understand an idea*, you can **walk through this technique very slowly to pinpoint exactly what you don't understand**, so you can go to the textbook, lecture notes or a teacher and figure out exactly what detail you're missing.

If you're trying to *remember an idea* for a test, you can focus on **creating better analogies or simplify the words** even more to understand it more vividly.

Finally, if you want to use this technique to *study for tests*, **go through the technique without looking at your reference materials**. That's a really good way to self-test, to see if you understand the ideas deeply. Because if you can go through and explain the material, without looking back at your textbook, that means you really understand the ideas.

Go use this technique right now! Take out a blank piece of paper and go through the technique on an idea you're currently learning. It will only take twenty minutes, but if you get in the habit, it is an excellent way to learn ideas better.