

Day 21 - Elaboration

Welcome to the how to learn anything course from Play-Doh university, where you're going to learn the science-based tools of pro learners to accelerate your learning. Remember more and master any hard skills. These are the secret techniques. They didn't tell you in school.

If you're passionate about changing your life with learning, join us, at plato.university to get exclusive content with every lesson. I'm your learning guide, Brandon Stover and let's get started.

All right now we're onto technique number eight, which is elaboration.

And this is another technique that's going to help you commit things to long-term memory.

Now when you're committing things to long-term memory, you can broaden your set of links by actively thinking about what you're learning as well as by writing it and talking about it. And the technique of self-explaining or elaboration can help with this. With this technique, you actively trying to explain in your own words, what you're learning

it involves explaining and describing ideas with many details. Elaboration also involves making connections among ideas. You are trying to learn and connecting the material to your own experiences, memories, and day-to-day.

Now a specific method of elaboration It's called elaborative interrogation. Interrogation means to question. So in this process, you're asking yourself questions about how and why things work and then produce the answers to these questions. The specific questions that you ask will depend in part on the topics. So, for example, how does X work?

Why does X happen? Why did XR been? What caused X? What is the result of X and so on?

So what's an example of this. Well, imagine that you're studying calculus and the topic is. You can start asking yourself how to derivatives work and then answer that well, they are the rate of change. Well, how does that work? Well, you take a look at one point. Then you take a look at a prior point over some interval, and then you take the difference divided by the interval.

As that interval approaches zero, you have the instantaneous rate of. Why does this happen? Because instantaneous means that the interval is nothing. Now this is a really complicated example of calculus, but you can see how I lead myself through different questions and started to elaborate by answering that question.

During this process of making explanations of what you've learned, You're trying to simplify, improve and provide examples of the idea concept.

Now what's the science behind elaboration of why it works so well. Well, elaboration invokes, deep processing of the material by forming new associations and can also involve chunking and deliberate practice depending on the specific nature of the.

Elaboration works in part because it induces the generation effect, which is enhanced memory that results from retrieving or organizing information from long-term.

You often induce this effect when you've learned something and you try and teach it to another person

because the process of teaching it or explaining it to another person requires you to process the information very deeply, organize it. And think about the association. Do you want to tap in. And the newest negotiations you want to create when teaching the other person,

well, you don't necessarily need to be actually teaching somebody else. You could just be explaining the steps that you're going through. Say when you're solving a problem or recalling.

For example, let's say you're working on a numerical problem. Stop it every step and ask the question, why am I doing this step? and then try to come up with an explanation to that answer. And one experiment, students who explain their steps when solving logical reasoning questions scored 90% better on a later.

Students who didn't self explain their steps scored only 23%.

Well, what's really in it for you when you're using the elaborative technique. Asking yourself, a number of why and how questions will encourage you to produce explanations for the ideas you're learning and to really integrate the new material you are learning with the things you already know or have experienced in the past.

And by integrating these new ideas with what you've already learned helps you to organize the new ideas, making them easier to bring to mind later.

Such as when you need to apply these concepts in real life.

And by using the elaborative interrogation technique, it encourages you to think about relationships between different ideas and understanding how two ideas are both similar to one another. And how are they are different from one another, improving your understanding of the overall materia?

now Plato university. We sometimes have. The elaborative technique, our courses are laid out in a manner that connects each chunk of a skill with the previous lessons. As you learn them, you begin making connections between those lessons to build up your overall proficiency of the skill along the way.

During particular active recall exercises, we may ask you to elaborate on a topic, showing your understanding of these various conditions.

Now, how do you start using the elaborative technique?

Well, when you're approaching learning something, look at the different subjects, concepts, or ideas that are coming from the thing that you're learning begin asking yourself questions about how these ideas work and why.

And when you ask these questions, try to actively recall without looking at your learning material or your. The answers to some of those questions, putting the answers in your own words and using your own elaborative details.

As you continue to elaborate on the ideas you are learning, make connections between multiple ideas to be learned and explain how they work together. A good way to do this as take two ideas and think about ways that they are similar in ways that.

and then take this even one step further by describing how the ideas you are studying, apply to your own life, experiences or memories. In addition, as you go through your day, take notice of the things happening around you and make connections to the ideas you're learning about

doing this makes you go through the practice of active recall throughout the day. Spaced repetition of your material, which we'll cover in the next technique.

our activity is to try and explain and describe the idea of elaboration with as many details as possible to somebody. Why use elaboration? How does it work? Answer those questions and create an explanation without looking over your notes or going back and listening to this lesson.

Once you create an explanation for yourself, then go ahead and check your notes. How accurate.

If it was a little inaccurate, then maybe you need to revisit the material or look for another source about elaboration. And we'll put some links down below, maybe look through some of the studies so you can get a better concept and understanding of it.

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