# Day 30 - Experiment

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 on to technique number 16, which is running experiments. And this is another technique that's really going to help you master any material that you're learning.

When you're doing an experiment, you're exploring application of skills outside of the predetermined ways you originally learned.

And by doing this, this is going to help you further advance those skills that you learned.

Now I'm going to describe three types of experiments that you can run and give an example of each along the way.

In your learning process. The first experiment that you can do is experimenting with different learning resources.

And this means experimenting with the methods, the materials, and all the different resources that you're using to learn a skill or subject.

And this kind of experimentation is very useful for helping you to discover the right guides and resources that are going to work for best for you for learning.

A good strategy when doing this is to pick up a resource, maybe a book or an online class and apply it rigorously for a predetermined period of. Once you apply yourself aggressively to that new method, you can step back and evaluate how well load is working for you and whether you feel it makes sense to continue with that approach or try another.

For example, let's say you're learning how to become an art.

you could try out a bunch of different techniques in order to learn how to become an artist. Maybe you follow a home study. Course you watch fellow artists, you sketch from life in the studio,

or worked directly with an artistic team.

the second type of experimenting that you can do is experimenting with technique.

Now in the beginning, when you're such running experiment, you're often focusing on how you can learn the, of specific skill and focusing on the different materials that you could use. However, when you start becoming a master at something.

The question often becomes not how can I learn this, but what should I learn next in the sequence of steps to actually master the skill?

so for example, let's say you're learning a language,

usually the same basic set of vocabulary and phrases dominate most beginner resources. As you improve. However, the amount of things you could possibly learn

becomes a larger and larger.

You could be asking yourself if you should learn to read literature, converse, fluently, unprofessional topic, read comic books, have business discussions and so on and so forth. The specialized vocabulary, phrases and cultural knowledge in each one of those fields multiply. So it becomes necessary for you to choose which techniques to master.

This is where experimentation comes into play. Pick some subtopic within the skill you're trying to cultivate, spend some time learning it aggressively and then evaluate your progress.

Eventually asking yourself, if you should continue in this direction that you're learning or pick another,

our third type of experiment is experimenting with style.

Once you really start to master a skill, it becomes difficult to switch between learning resources or focusing on which techniques that you'd like to master. And instead you're starting to want to create your own.

Now there are some skills that maybe there's one correct way to do it, but with most things you can take your own spin on it and create your own style of that skill,

especially skills and writing design, leadership, music, art, and research. Which all involved, developing certain, certain styles.

Once you master the basics, there's no longer one right way to do everything, but many different possibilities, all of which have different pros and cons and different trade-offs creating strengths and weaknesses to the ways that you applied.

So, for example, if you're learning how to become a better writer, there's tons of different writing styles that you can choose. And after you start to practice some of them and master them, you can start to create your own style as a combination of these or something entirely. Nikki to experimenting with different styles is to be aware of the different styles that exist.

you should spend a good amount of time studying and discussing the works of other great people that are using that skill.

This will give you a large library of possible styles and ideas that you could adapt to your own.

So identify the masters in your own line of study and dissect what makes their styles so successful and see if you can emulate or integrate it into your own approach.

Now, why does experimentation work? So. Well, when you're starting to learn a new skill often it's sufficient simply to follow the example of someone who is further along than you.

However, as your skill developed, it's often no longer enough to simply follow the example of others. You need to experiment and find your own.

Part of the reason for this is that when you're learning something early on, it's the path that most people have taken. And so there's a lot of support and easy

places to begin as your skill develops. However, not only are there fewer people who can teach you inferior students who can act as your peers.

But you also start to divert from those you're learning from,

to novices may have very similar skillsets, but two experts might have quite different sets of skills that they've already acquired, Making improving those skills increasingly personalized,

uh, second reason for the value of experimentation as you approach mastery is that abilities are more likely to stagnate after you've mastered the basics.

In the beginning, you're requiring new facts, knowledge, and skills to handle problems. You didn't know how to solve before getting better. However, increasingly becomes an act of unlearning. Not only must you learn to solve problems you couldn't before you must unlearn stale and ineffective approaches for solving those problems.

The master not only knows how to solve a problem, but knows the very best way to solve the problem. The best way to apply his knowledge in an efficient and clean.

a final reason for experimentation as you approach mastery is that many skills reward, not only proficiency of applying the skill, but also originality,

For example, successful business leaders are those who can spot opportunities. Others can not merely copy the style and strategy of businesses that have come before them.

so as creativity becomes more valuable, experimentation becomes essential.

And this leads us to why you're going to want to practice it by creating your own experiments and getting yourself better at these skills, you can, you lead yourself down a path of mastery that sets you apart from everyone else who knows this skill.

This is going to make you unique and more valuable when you're applying the skill.

Now in all our courses at Plato university, we supply additional learning resources for you to learn the material from different angles. In some courses, we ask you to apply skills in new ways.

However, we also strongly encourage you to run your own experiment, especially with techniques.

Now I'm going to share five tactics that you can use to start running experiments in your learning.

The first tactic is called copy, then create.

And this is exactly how it sounds copying the work of another master, and then using that to create your own work or own application of that.

Copying simplifies the problem of experimentation somewhat because it gives you a starting point for making decisions.

If you're learning to paint the possibilities of what kinds of art you can create and techniques you can apply are so vast that it can become difficult or impossible to decide. However, if you start by emulating another artist, you can use that foothold to venture further into your own creative directions.

There's also another advantage beyond just being able to whittle down the choices available to you. When you're attempting to emulate or copy another work, you have to deconstruct it and understand why.

And this will start to highlight little nuances within the style that make it exceptionally well, which you can start to apply in your own practice.

Tactic. Number two is to compare methods. Side-by-side.

And this is done by trying to different approaches and varying only a single condition to see what the impact is

by applying two different approaches side by side. You can often quickly get information, not only about what works.

But also which methods are better suited for your own personal style?

So, for example, if we're returning back to learning how to paint or to be an artist, let's say we paint two paintings and we paint them almost exactly the same way, but the only difference that we changed between. Is that the colors that we're using and here now we're going to dive into exactly which colors are going to work best with this style.

Now there's two advantages to doing these types of split tests. The first is that as in, in scientific experiment, you will get much better information about which method works best. If you limit the variation to only one factor, you want to be. The second is that by solving our problem multiple ways or applying different solution styles to it, you will increase your breadth of expertise.

All right, let's move on to tacting to number three, which is introducing new constraints.

Now when you're first learning something, the challenge is often you don't know what to do. That's why you need to learn the process and start developing the skill. But towards the end of your learning, when you're starting to master something, you already know the steps you need to go through, you know exactly what.

And because of this, you often rerun old routines and old ways of solving problems because they become habit and they may not actually be the best way to solve a problem. So a powerful way of pushing out of these grooves of routine is introducing new constraints that make the old methods impossible.

we often see this tactic in the design fields. When you give a designer unlimited freedom, they try and put in a ton of different things in the solution. Often becomes a mess. On the other hand, if you start creating specific constraints and how you. It encourages the designer to explore options that are less familiar to them and sharpen their underlying skills.

All right. Tactic number four, creating a hybrid of unrelated skills.

Now on the traditional path to mastery, we usually take a well-defined skill and we Practice it over and over again until we become insanely good at that one skill.

For example, if we're playing a specific position on a basketball team, we're going to get really good at those movements and actions that we need to take on that position. However, for many other areas in life like creative or professional, A more accessible path to mastery is combining two skills that don't necessarily overlap to bring a distinct advantage that those who specialize in only one of those skills wouldn't have.

For example, you may be a software engineer who becomes very good at public speak.

You may not be the best software engineer on the team, and you may not be the best speaker, but by combining those two skills, you can make the best person to present on engineering topics for your company. We're teaching others about software engineering.

And the final tactic to creating experiments is exploring the extremes.

Especially when you're becoming the master of something in developing your own style, you're going on and want to push the boundaries of what other people have done with this skill. This is really going to set you apart from everyone else and make you very.

This suggests that for many skills, the best option is to go extreme in some way, since so many more of the possibilities are themselves extreme sticking to the middle and playing it safe. Isn't the correct approach because this allows you to explore only a small subset of the possibilities for your.

Pushing to an extreme, in some aspect of the skill you're cultivating, even if you eventually decide to pull it back to something more moderate is often a good exploration strategy. This allows you to search the space of possibilities more effectively while also giving you a broader range of experience.

What does this look like in application? Well, let's use a really simple example. Let's say all of the artists, artists of our time currently are learning how to paint squares

Everybody's practicing the skill of painting squares and becoming a master at it.

Instead of painting squares. Like everyone else, you learn that technique, but maybe you start to paint circles as well. Here. You're pushing yourself outside of the boundaries of what society has said is get a good painting and beginning to experiment with different styles techniques. The ways you believe that you should be mastering painting.

Now, of course you could try this with any other skill that you're learning. You just need to know the different constraints to that skill, and then start taking those constraints to the extreme.

To practice this technique today. I want you to run one of our three types of experiments. So whether that be an experiment with the learning resource and experiment with the technique and how you're learning,

we're experimenting with your own style and the application of a skill, an easy way to start. Is to try out a different learning resource on these same topics and techniques that we're covering in this course about learning

tri learning these techniques in a different way.

As we know from our previous lessons in the course, this is going to create more synaptic connections in our mind and really embed these techniques into our long-term memory. At this point, you should be really mastering these techniques. So this is just going to solidify what you've already learned.

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