

4 Principles of Effective Learning

Instructions: Read and record Page 1 only.

Read and Record ([link](#))

Tell me if this sounds familiar: You read a book, and *it speaks to your soul*. You highlight every other paragraph and *wonder how you ever lived without this information*. Then a few days or weeks later, you have trouble *recalling the main points* when trying to explain it to a friend.

I've struggled with this, and it's super-frustrating. I would read a book or listen to a talk and have the feeling that I grasp what is being said. But when it came time to recall that information later on, I would (draw a) blank. I couldn't recall what I had learned.

What's the point of reading a bunch of books if you can't recall the information later?

The Illusion of Competence

In today's world, we have so much information at our fingertips and are being **bombarded** with it all day long that it's easy to feel like we know things -- like we're informed. But there's a difference between truly understanding something and just *feeling* like we do. This "feeling like we do" is sometimes called *the illusion of competence*.

Why don't we remember what we learn?

As far as I can tell, there are four main reasons:

1. We get **bogged down** by details.
2. We don't spend enough time with it.
3. We don't actively use it.
4. It's not **relevant** to our lives.

How can we remember more of what we learn?

Below are the most important principles and strategies I've distilled from a variety of sources over the years. I've given each a **tidy** little name by which you can remember them. Just remember the first letter of each word, and it will help you S-E-A-R information into your memory. ;-)

- Structure
- Effort
- Active Learning
- Reason

These principles have helped me remember and absorb more of what I learn. I hope they help you too.

4 Principles of Effective Learning

PRINCIPLE 1: STRUCTURE

Organize and clarify the information.

How information is organized and structured plays an important role in how you process and understand it. Here are some strategies to help you use this principle to your advantage.

Pay attention to how the information is organized.

In order to learn more effectively and efficiently, you need to uncover the structure by which information is organized. Often, this structure is not explicitly stated so you may have to figure it out yourself. **Virtually** all information can be structured in at least one of the following five ways (thanks to Jim Kwik for this mnemonic device).

Location

Alphabetically

Time

Category

Hierarchy

For books, the table of contents is an extremely powerful but often overlooked way to do this. It's like a map — it helps you **orient** yourself within the big picture without getting lost in the details. It also helps you understand the core concepts of the material. Which brings me to my next point...

Identify the main ideas.

Once you've figured out the basic structure of the topic you're learning, the central themes, ideas, and concepts will become clearer to you. **The key here is to keep it simple**. Don't get bogged down with superfluous details. As you read or listen to material, ask yourself **periodically**: "What is the main idea being communicated in this paragraph, chapter, book, lecture, etc.?"

Understanding the main ideas will allow you to dive into the details of each without becoming **overwhelmed**. But if you try to learn the details first, without becoming acquainted with the structure of the material, you will get confused and not know where you are.

Most books are too long.

Most good non-fiction books contain only one to three big ideas on which they are based and could be summarized in a meaty blog post rather than in 200-300 pages. If you want to extract the meat of the book, identify the main ideas through the table of contents and don't worry about the rest. Most of the space in a non-fiction book is spent trying to convince the reader that the ideas are valid and then providing supporting evidence for them.

This is one reason why I love TED Talks or interviews with authors — the shorter format forces them to **distill** their main ideas **down to** their most important parts. I often listen to several author interviews or **keynotes** before reading their book.

4 Principles of Effective Learning

PRINCIPLE 2: EFFORT

Engage with the material.

This principle is the heart of learning. It requires you to take an active role in your comprehension rather than just passively consuming information. The more **cognitively** challenging your learning methods are, the more likely it is that you will **retain** the material. Although, I have to warn you, these strategies are not sexy. Or easy. But they are effective. Here are some ways to apply this principle:

Test your comprehension.

When you come across an idea worth noting, instead of just consuming it and moving on to the next one, close the book or pause what you're listening to and try to recall what you just learned. Write it down in your own words. The point here is to **practice recalling it on your own**, without the help of the source material.

If you're not in the habit of doing this, it will be challenging at first. It's similar to going to the gym if you haven't been in years. You're working out mental muscles that haven't been trained in a while. It's cognitively demanding. But it's this very quality that has been shown to help your brain learn more effectively. Recalling information strengthens the connection that made the recall possible, which is the beginning of a long-term memory.

Often, learning isn't a problem of *retention* but rather a problem of *attention*. Periodically **quizzing** yourself on what you're learning ensures that you won't space out.

Take notes

In addition to testing your comprehension, you can also write down other thoughts about the material. This will help make it stick better by attaching more "cognitive hooks" to what you're learning. Here are some **prompts** to help you:

- What are your general thoughts or feelings about the information?
- Why do you agree or disagree?
- Where does this material fit into your life?
- How does this idea relate to what you already know?

Why it works

The reason this works is because it helps information stay in your working memory longer, which makes it more likely (that) it will be transferred to long-term memory.

Your **working memory** is like a holding cell. The problem is that it only has a 2-4 "slots" where information can be stored before being transferred to long-term memory.

If you overload your working memory by constantly feeding it new info, you don't give it enough time to **savor** and **engage** with each idea. As a result, instead of being transferred to long-term memory, the information disappears (**aka** you forget).

4 Principles of Effective Learning

We live in an age of information overload. You may have already come across the one idea that could change your life, if only you had taken the time to master it and absorb it rather than moving on to the next new idea. **Quality over quantity.**

Practice remembering.

The most effective way to ensure information stays in your working memory long enough to be transferred to long-term memory is to practice recalling it at regular intervals.

Remembering is like any other skill. If you want to get better at it, you must practice it consistently. When you recall something, you are practicing retrieving it from your memory.

This is the whole idea behind **spaced repetition**. *After you learn something new, your ability to recall that information decreases as time passes, until it finally disappears altogether.* That is, unless you recall it before it goes away. *Studies show that recalling information just as you're starting to forget it is the most effective way to strengthen the neural connection that made the recall possible.*

Think of it like working out. You wouldn't go to the gym once and think that's all you need. You need to exercise on an ongoing basis if you want to continue to reap the benefits. The same is true for learning and strengthening neural connections. Consuming information one time doesn't **cut it**, just like going to the gym one time won't give you a beach body for life.

Tools and techniques

There are several spaced-repetition apps to help **optimize** your learning schedule and **integrate** the practice into your life **seamlessly**. If you want to dive deeper into this subject, a great book I'd recommend is [*Make It Stick*](#).

If you're more **old-school** (like me), you can do an **analog** version of this method using regular old **index cards**. Ryan Holiday uses a note-card system for revisiting information he wants to remember, which he [talked about on my podcast](#). (He uses this system primarily for taking notes but you can easily turn the note cards into **flash cards** and quiz yourself).

A note on highlighting

The act of **highlighting** while reading in and of itself is not cognitively demanding enough to help you remember things long-term. But that doesn't mean it's not useful. The reason to highlight passages is so you can easily locate the information you want to practice recalling in the future. **What you do not want to do** is highlight a passage and never return to it again. That defeats the purpose.

4 Principles of Effective Learning

PRINCIPLE 3: ACTIVE LEARNING

Use what you learn.

Teach someone else.

One of the best ways to learn is to teach. When you learn something with the intention of teaching it later, you pay attention differently. It forces you to clarify concepts and ideas in your mind and recall them in a way that increases both your comprehension and retention. The ability to teach something successfully is one of the best indicators that you truly understand it.

“When you teach something, you get to learn it twice.” —Jim Kwik

Apply it to your life.

Your brain tends to remember **concrete** concepts more easily than **abstract** ones. How do you make ideas more concrete? Use them. **Integrate** them **into** your life. Test them out in the real world. *The sooner, the better*. When you actively use information, it makes it more real and less abstract. Which brings me to the final principle...

PRINCIPLE 4: RELEVANCE

Have a good reason for learning.

Only read it if you need it.

From an **evolutionary perspective**, part of the reason we developed memory was to store information related to our survival (i.e. complex social dynamics, location of food sources, etc.). Today, we no longer need to remember the location of berries in our backyard, but we still do need to make sure that what we're learning is important to us in some deep way.

A good rule of thumb here is to **read to solve immediate problems**. This will help the information stick in your mind more easily. When you read in order to solve a problem or find an answer to a specific question, you are more **alert** and **receptive** to new information, which increases **comprehension**. Focus on learning information you can use *now*, not at an undefined date in the future. The more relevant information is to your life, the more likely you are to apply it, remember it, and use it again in the future.

For example, when I was in my early twenties, I had **acne** and became extremely motivated to cure it with a diet-based approach. During that time period, I had excellent retention for any information I came across that had anything to do with clear skin, nutrition, or diet. And most importantly, I still have the bulk of that knowledge more than a decade later. Having a "**why**" is extremely powerful.

4 Principles of Effective Learning

Seek information that truly interests you.

Skip the boring parts of books. If you find your mind **wandering**, skip to the parts that excite you. This may seem like “cheating” but it’s actually an extremely effective way to make material “**stickier**.” Your brain will **soak up** information more readily if you focus on things that you’re truly interested in. This is partly because *interest increases dopamine production*, which puts your brain in an optimal emotional state for learning.

If you’re in school, I realize this isn’t always possible since you’re not in complete control of your **curriculum**. In this case, try focusing on the aspects of the material that do pique your interest and relate them to other subjects you already know about that interest you.

Summary

Here’s the TL;DR version for those of you who just want to cut to the nitty-gritty:

4 Principles of Learning

BY RUBEN CHAVEZ / THINKGROWPROSPER

STRUCTURE: Organize & clarify information.

Pay attention to how information is organized to understand the big picture and grasp the main ideas. Don’t get bogged down with superfluous details. Keep it simple. Ask yourself: “What is the main idea being communicated here?”

EFFORT: Engage with the material.

Test your comprehension by writing down what you learn in your own words without looking at the source material. Strengthen neural connections by using spaced repetition. Keep ideas in your working memory longer to make them stick.

ACTIVE LEARNING: Use what you learn.

Make abstract concepts more concrete by applying them to your life and teaching them to others.

RELEVANCE: Have a good reason for learning.

Consume information that’s relevant to your life in some way. Focus on information you can use now, not at some unspecified point in the future. Read to solve problems. Seek topics that truly interest you.

4 Principles of Effective Learning

Comprehension Questions

1. Use the SEAR technique to explain the essence of this article to me and to help you remember it later.

Grammar Analysis

1. Search this article for the word *be* (six hits, not including this line).
Write down the full verb forms found in this search and list the following for each verb form:
 - a. Form (simple, emphatic, progressive, modal, infinitive)
 - b. Voice (active, passive)
 - c. Tense (one of the six tenses)
2. Search this article for the word *being*. (five hits, not including this line)
Write down the full verb forms found in this search and list the following for each verb form:
 - a. Form (simple, emphatic, progressive, modal, gerund, present participle)
 - b. Voice (active, passive)
 - c. Tense (one of the six tenses)
3. Search this article for the word *been*. (three hits, not including this line)
Write down the full verb forms found in this search and list the following for each verb form:
 - a. Form (simple, emphatic, progressive, modal)
 - b. Voice (active, passive)
 - c. Tense (one of the six tenses)