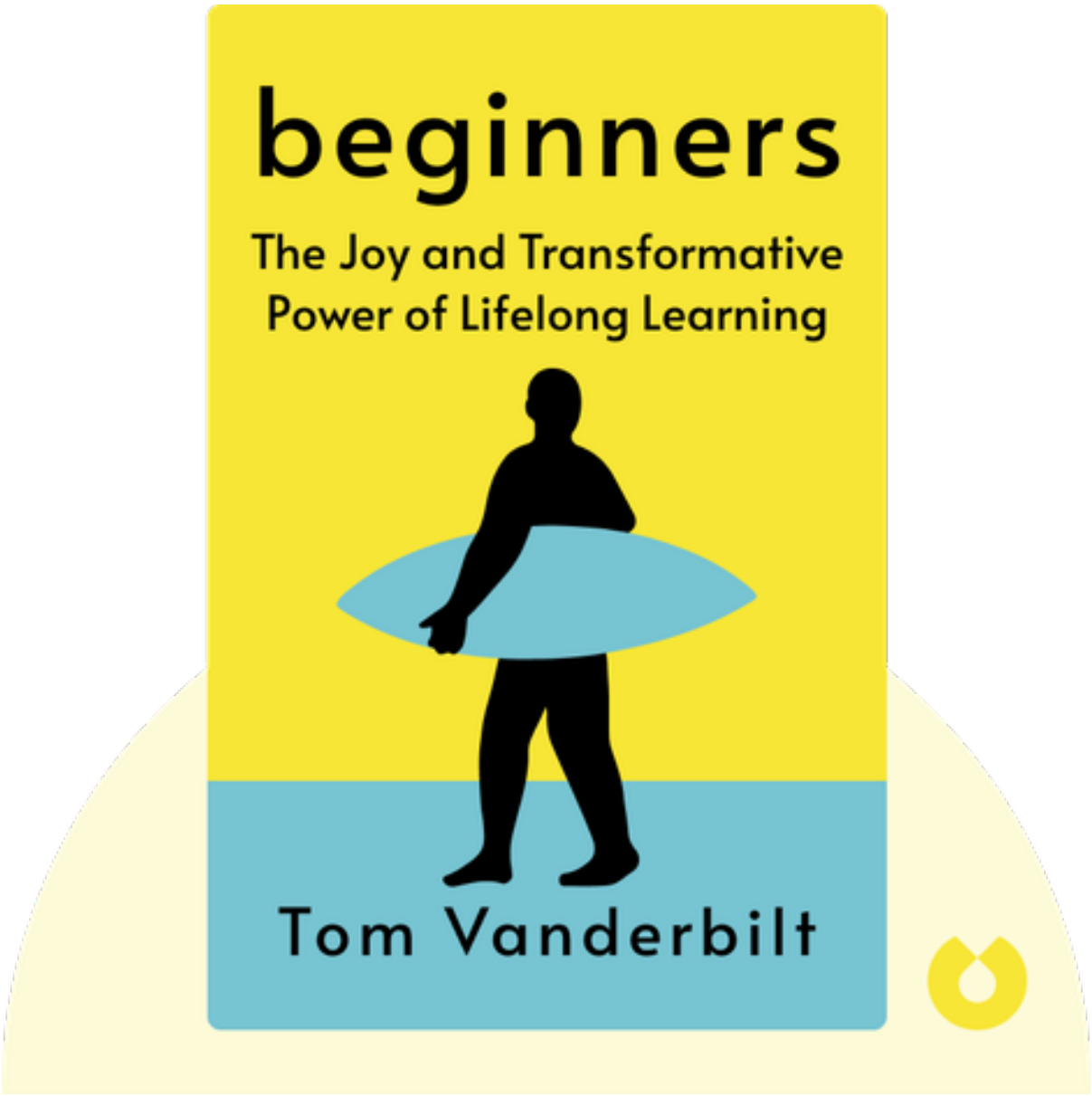

Beginners

The Joy and Transformative Power of Lifelong Learning

By Tom Vanderbilt

13-minute read

Synopsis

Beginners (2021) is a light-hearted study of the joys of life-long learning. Part personal story and part scientific primer, it demonstrates the benefits of always trying something new.

Who is it for?

- Middle-aged folks trapped in the same routines
- Seniors seeking ways to stay sharp
- Anyone eager for a little inspiration to never stop learning

About the author

Tom Vanderbilt is a prolific author with works appearing in *The New York Times Magazine*, *Popular Science*, *Smithsonian*, and *London Review of Books*. He is the author of best-selling non-fiction titles such as *You May Also Like: Taste in an Age of Endless Choice*, *Traffic: Why We Drive the Way We Do (and What It Says About Us)*, and *Survival City: Adventures Among the Ruins of Atomic America*.

What's in it for me? A scientific look at starting fresh.

Each of us is born into the world with lots of potential but very few skills. So it's only natural that the first years of our lives are dedicated to learning. We learn to walk, talk, and even eat. Then, we spend more than a decade honing our talents in school. And then what?

For many of us, the drive to pick up new skills wanes in adulthood. However, it doesn't have to be that way. Learning could be a journey that lasts a lifetime.

Journalist Tom Vanderbilt made it a personal quest to reignite his long-lost love of always learning something new. These blinks draw on his experience. They mix insights from the fields of psychology and neuroscience to explore how people develop new skills later in life. Along the way, they demonstrate the benefits of always remaining a beginner.

In these blinks, you'll learn

- why scientists love juggling;
- what separates a novice from an advanced beginner; and
- how a 70-year-old learned to swim in the mountains.

Life-long learning keeps your mind engaged, whatever your age.

Tom Vanderbilt had a steady career as a journalist. But when his daughter was born, he quickly discovered that he now had a second job. He became a teacher.

As Vanderbilt found, when you're a parent, you're always teaching your children new skills. First come the basics, like walking and talking. And, as they grow, you move on to more complex tasks, like riding a bike, cooking, and navigating social situations.

As Vanderbilt taught his daughter all these essential skills, he realized something about himself: he hadn't learned a new skill in years. So, he decided to change that. He challenged himself to learn a few completely new things, including chess and surfing. Vanderbilt soon understood that being a beginner again came with lots of benefits.

The key message here is: Life-long learning keeps your mind engaged, whatever your age.

We never really stop learning. Even minor activities like reading the news or watching television give our brains new information. However, this form of learning merely gives us declarative knowledge: facts, figures, even trivia. But not all knowledge is like that. There's another kind, one which the author calls procedural knowledge. It helps us actually do something: speak a language, play an instrument, or execute a technical skill.

As we grow older, we tend to learn fewer and fewer procedural things. But there was a time when every one of us was great at gaining new procedural knowledge. That time was childhood.

Kids see the world with fresh eyes. They bring no preconceived notions to new activities – and this means that there's nothing to hold them back.

Another important thing is that society doesn't expect children to be experts at anything. This makes kids far less worried about failure or appearing clumsy. And then, finally, their brains are simply wired to learn. The average seven-year-old has 30 percent more neurons available for soaking up new information than the average adult.

However, while adult brains are, perhaps, less nimble, they still retain plasticity. This term refers to our ability to change and learn. In fact, continuing to learn new skills as you age is fantastic for your mental health. Studies have found that when older adults practice new skills – like painting or writing music – they also improve in general cognitive tests.

Even if you only focus on mastering one new activity, you'll still open up your brain to more learning in the future. We'll explore one new skill, singing, in the next blink.

Singing is a skill that can be learned with practice.

When was the last time you sang? Did you do a little crooning this morning in the shower? Or, perhaps you hummed along to the radio while driving to work. Maybe you've recently belted out a pop classic at a karaoke bar.

It seems that humans are just wired to sing. However, most of us don't feel confident about our vocal abilities. In fact, when scientists at the University of California wanted to study embarrassment, they asked people to perform the doo-wop hit "My Girl."

So, if you blush whenever people ask you to sing, you're not alone. But it doesn't have to be this way. With dedicated practice, anyone can learn to hold a tune.

The key message here is: Singing is a skill that can be learned with practice.

The ability to sing well is often treated as something innate, like blue eyes or brown hair. We either have it, or we don't. But don't despair. Singing's just a motor skill, like riding a bike or typing.

Humans produce sound by pushing air through our vocal folds, a series of stretchy muscles inside the throat. By tightening or loosening them, you make the air vibrate at different frequencies. And that changes our voice's pitch. For the average male, the folds vibrate 120 times per second. When an opera singer hits a

dramatic high note, her folds go up to 1,400 times per second.

So, hitting the right notes and carrying a melody is merely a matter of coordinating your muscles and breathing correctly. This can be difficult for beginners, as they're not used to doing this consciously.

Where do you start, then? Well, most vocal lessons begin with exercises designed to help students reconsider their bodies. The aim is to look at the body as a musical instrument. This can involve making lots of strange, loose sounds like *oohs* and *ahhs*.

Of course, this process can be a bit embarrassing – especially considering that, according to surveys, most of us hate the sound of our own voice.

So, people often hold back or try to sing softly. Unfortunately, this will only make learning harder. The best singers throw their whole body into their performance. If you, too, want a voice that really resonates, you'll have to give it your all.

And it'll probably work best if you do it together with other like-minded people – as we'll see in the next blink.

Developing new skills works best as a social practice.

Walk through Manhattan's Lower East Side on a Monday night, and you might hear something strange. It will start softly, but, as you stroll down Rivington Street, the sound will become louder and louder. When you reach the Clemente Soto Vélez Cultural and Educational Center, all will become clear. What you're hearing is 50 people belting out the 1995 Oasis classic "Wonderwall."

Meet the Britpop Choir. They're an amiable pack of amateur vocalists, and they gather each week to sing songs that used to top the UK's charts. Together, they work through yesterday's hits from artists like Blur, Pulp, and David Bowie.

While the choir's members have a variety of backgrounds and skill levels, their differences don't really matter. What actually counts is that they've all come together to sing in unison.

The key message here is: Developing new skills works best as a social practice.

While it's possible to cultivate a new skill like singing all on your own, practicing in a social setting comes with many advantages. For one, participating in a group activity – like singing in a choir – taps into the innate human desire for social bonding. When people work together to harmonize and breathe in unison, their stress levels drop. And they also benefit from an increase in the production of oxytocin, a hormone connected to happiness.

But the benefits don't end there. Practicing in front of others, or in a group, can also boost your performance. Humans learn best by observing others and getting feedback. Singing in a group allows you to do both at the same time. You hear the voices all around you, and you constantly coordinate your own tone and pitch with the rest of the choir.

The increase in ability that comes from working in a group is called *social facilitation*. And it's not just limited to rehearsal rooms. The social psychologist Norman Triplett first observed it in the world of sports. He found that professional cyclists always achieved their best times when riding together with others.

Singing in a choir is one of humanity's oldest and most popular group activities. So, if you want to sharpen your skills, you'd probably really benefit from joining a local club.

Alternatively, you can get help from the Internet: apps like Smule allow amateur singers from around the world to practice together, wherever they are.

Log on, and in a matter of minutes you could be singing a duet with someone from Sweden or Indonesia. Don't worry if your voice isn't perfect at first. Learning isn't always a smooth process, as we'll find out in the next blink.

Learning the basic rules is just the first step in a long journey.

Imagine yourself out at the beach bobbing in the water just offshore. You've been taking surfing lessons all week, and now, after hours of practice, you're starting to feel more confident. So, as the next wave comes, you spring into action.

First, you paddle along the growing swell. Next, you train your eyes on the shore and steady your body. And finally, as the wave crests, you push down and pop yourself into a crouch. For a moment it all goes as planned. Then, suddenly, you come toppling down into the water.

What went wrong? You followed your instructor's advice perfectly!

As it turns out, that rigid adherence to the rules is exactly what sent you plummeting face down into the waves.

The key message here is: Learning the basic rules is just the first step in a long journey.

University of California professors Stuart and Hubert Dreyfus spent decades studying how adults learn new skills. They examined everyone from fighter pilots to chess players, and they found that skill acquisition usually comes in five steps. People start as *novices* and then progress through the stages. First, you're an *advanced beginner*, then

come *competence*, *proficiency*, and finally, *expertise*. And making the jump from novice to advanced beginner is harder than it seems.

To become a novice, all you need to do is get the basic rules right. A novice chess player learns how pieces move, a novice surfer picks up the textbook procedure for mounting a board and riding a wave. On paper, this works great.

But, to become an advanced beginner, you must begin to use your new skills in the complex and messy real world.

Consider what it's like to learn a new language. At first, you'll make rapid progress picking up vocabulary and memorizing grammar. Yet, talk to a native speaker, and you'll quickly realize just how many exceptions and irregularities you still need to master.

English learners will probably remember the frustration of discovering that the past tense of *speak* is not *speaked* but *spoke*.

So, while becoming a novice is easy, stepping up to the advanced beginner stage can be a great deal harder. Because of this, people learning any new skill often become frustrated by their sudden lack of progress and give up early. In surfing, only 5 percent come back after their first lessons!

Yet, with patience and dedication, you can get over this initial hump and begin to really improve your skills.

To master a skill, practice it until the movements become automatic.

Let's say you're riding your bike down the street, and suddenly, a ball bounces into your path. To avoid a disastrous collision, you need to turn left. Sounds easy: after all, all you have to do is turn the handlebars.

Well, not exactly. Before you jerk your wheel to the left, you must lean your body to the right. This subtle movement redistributes your weight and keeps you balanced. Of course, as a skilled cyclist, you'll do this automatically.

Unconscious actions like these are at the heart of any technical ability. Learning a new skill is often about becoming so proficient that the nuances fade into the background.

The key message here is: To master a skill, practice it until the movements become automatic.

Scientists who study learning love to use juggling as a test case. It's a simple skill that nearly anyone can learn. Plus, it's easy to practice and monitor in a laboratory setting. So, while the act of repeatedly tossing and catching balls may seem straightforward, it can actually reveal a lot about how we develop talents.

For one, scientists find that over-thinking can be a strong barrier to acquiring skills. When trying a new task, like juggling, people work hard. They try to remain conscious of every movement they make, whether it's throwing a ball into the air, tracking, or catching it. Distributing focus like this can overwhelm the brain. But for more experienced jugglers the basic movements come unconsciously. This frees their minds to focus on the overall juggling pattern.

So, what's the best way to learn? The answer is, observing and doing. They are so much more beneficial than simply receiving instruction.

In one experiment, scientists followed two groups of beginner jugglers. One group received a detailed written guide, while the other got to watch juggling videos. Guess which group was more successful. That's right, it was the people who watched other jugglers, not those who just read a textbook.

Watching someone else fulfill a task, and then trying it out for yourself, engages the brain in a special way – and that really helps us learn.

As you practice a new skill, or even just intently watch someone else do it, you build new neurological connections. You develop something that's often called *muscle memory*. But really, it's your brain that's doing the heavy lifting. We'll explore this more in the next blink.

Learning to draw is all about learning how to see the world with fresh eyes.

In 2017, Google released a list of the most popular searches which began with the phrase *how to…* Topping the list was *how to tie a tie*, followed by other practical queries such as *how to write a cover letter*, and *how to lose weight*.

Curiously, fifth on the list was something a little more whimsical. A lot of people searched for *how to draw*. Now, drawing is one of the first activities we pick up as children. Nearly every kindergarten offers kids crayons and markers.

So, if we all start out like this, why do so many feel incapable of drawing? Surely, most adults have finer motor skills than toddlers. Well, as it turns out, the problem isn't physical coordination.

The key message here is: Learning to draw is all about learning how to see the world with fresh eyes.

If you haven't drawn since school, you're probably not confident in your abilities. And, unfortunately, your hesitance might be justified. Attempt a self-portrait. You probably wouldn't be surprised if it came out all lopsided and disproportionate. Why is drawing a realistic face such a challenge? One issue is that we draw the world as we imagine it, not how it actually appears.

A famous study illustrates how this works. In it, participants saw a simple picture of two circles connected by a line. Scientists then separated people into two groups and asked them to reproduce the drawing from memory. But there was one key difference. One group was told the picture depicted a dumbbell; the other group, a pair of glasses. In the end, each group's drawings were radically different. Their sketches resembled the object they were told about, rather than the original sketch.

So, novices often draw their idea of a face rather than how it actually looks. They overemphasize features to which the human brain pays more attention. Eyes, for example, appear much more prominent than other details. In fact, 95 percent of untrained artists will depict faces with oversized eyes near the top of the head. But if you look in the mirror, you'll see that your eyes are actually relatively small and placed near the center of your face.

To overcome this perceptual bias, effective drawing lessons focus on making students draw what they actually observe. Instead of drawing whole things, students practice by rendering shapes and shadows. At first, these drawings appear very abstract, but as learners fill in the details, their work becomes much more accurate.

It's never too late to try something new.

Meet Patricia. She's lived a rich life which included a successful career working in French new wave cinema. After retirement, she moved to the rustic mountain town of Chamonix to ski, play tennis, and relax. Then, at age 70, she wanted something more. She wanted to swim.

Now, Patrica was a pack-a-day smoker who'd never swum before. But she was determined. Unable to find a local instructor, she watched tutorials on YouTube. Each night she would pace her apartment practicing strokes. Each morning, she would head to the pool to test her progress.

All that training paid off. After a year, Patricia took a trip to the Greek islands and did something she never thought possible. She swam a kilometer in the crisp waters of the Mediterranean.

The key message here is: It's never too late to try something new.

Patricia's approach to life is all about continually learning. Even at her age, she regularly challenges herself to try whatever interest strikes her fancy. After taking up swimming, she moved on to two new pursuits: playing pickleball and studying astronomy.

Patricia's attitude can serve as a very powerful lesson. As we age, it's important to remain a beginner at something.

Another example is David. Growing up, he had many interests. In college, he studied philosophy, architecture, and economics. Afterward, he indulged his love of nature and dabbled in being a park ranger. Finally, as an adult, he took an apprenticeship as a jewelry maker. For three years, he spent hours mastering the traditional crafting techniques and eventually became an expert.

However, even as a certified expert at handcrafting jewelry, he didn't just coast on his success. The world of making had gone digital, so David jumped right in. He learned the art of computer-aided design and began to use complex drafting software like Rhino. These digital skills, combined with his aptitude for manual work, opened up a whole new field of creativity. Now he's able to create things he couldn't have even imagined in the past.

So, if you're feeling in a rut, remember that there's always something new to learn. Discover what opportunities exist near you. Check your local papers, go on Google, or simply ask your neighbor.

You may find yourself trying a cooking class, learning to weld, or discovering the joy of birdwatching. You never know what you'll learn next. As the Roman philosopher Seneca once said, "It takes a whole life to learn how to live."

Final summary

The key message in these blinks:

All too often, adults become content with their accomplishments and stop learning new skills. Moreover, our society disparages being a beginner as something only fit for children. Yet, continually challenging yourself to take on new interests and hobbies is a fantastic way to keep your brain alert. Developing a new skill or cultivating a new talent makes you see the world, and yourself, in a different light – and this will keep you happy and engaged as you age.

Actionable advice:

Learn something pointless.

There's a lot of pressure to only spend time acquiring marketable skills, like coding. However, there's a certain value in learning something just because it brings you joy. Never feel guilty if you spend time on a hobby even if it's not *professional*. Learn to fly a kite, dance, or speak a new language. Why? Just because you enjoy it.

Got feedback?

We'd love to hear what you think about our content! Just drop an email to remember@blinkist.com with *Beginners* as the subject line and share your thoughts!

What to read next: *Late Bloomers* by Richard Karlgaard

You just learned the value of making skill acquisition a life-long endeavor. Next, get a little inspiration about hitting your stride late in life with our blinks on *Late Bloomers*.

These blinks examine why some of the most successful people only find their true path well into adulthood. Drawing from the fields of psychology and neuroscience, as well as personal experiences, this survey of unconventional careers demonstrates that life doesn't end at 25.