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In the summer of 2011, my wife, my parents, and I took a tour of a whisky distillery in Scotland. The tour guide seemed almost catatonically bored. At each stop, she’d recite a memorized script and then ask, “Are there any questions?” but of course there weren’t, because that would mean we’d been listening. And what I remember most about the tour—other than wishing we could skip ahead to the tasting—was that I spent most of my time thinking about Chris Rock.

I’d been reading a book (Little Bets by Peter Sims) that described Rock’s process in developing new material for his standup act. In preparing for one tour, Rock made between 40 and 50 appearances at a small club in New Brunswick, New Jersey. He’d show up, carrying a yellow legal pad with his ideas scribbled on it, and start experimenting with new bits. Sims writes, “He watches the audience intently, noticing heads nodding, shifting body language, or attentive pauses, all clues as to where good ideas might reside. In sets that run around forty-five minutes, most of the jokes fall flat.”

But with time, he digs out the material that works. The jokes get sharper and the transitions get tighter and the delivery gets
smoother. (So if you’ve ever cracked up at one of Rock’s lines—“I live in a neighborhood so bad you can get shot while getting shot”—then you might have New Jersey to thank.)

By the time Rock performs the routine for an HBO special, or in an appearance on David Letterman, he has long since mastered the material. Perfected it. And, as a result, he’ll give the illusion of effortlessness: *Chris Rock is such a funny guy.*

A few months after the whisky tour, I was giving a speech, and I caught myself telling a story the same rote way I’d told it a dozen times before. And a nasty thought struck: *I am the whisky tour guide.* (Thankfully, I stopped short of verbalizing this thought, thus avoiding what could have been a deeply confusing moment.)

In life, we’ll face this choice again and again: to be the whisky tour guide or to be Chris Rock. Will we be content to cruise along on autopilot or will we scramble and suffer to get better? Will we plod or will we practice? This book is a guidebook for anyone willing to make the latter choice.

There are many full-stop moments in the pages that follow—ideas so interesting that you can’t help but pause for a second and consider them. One of those ideas is that practice doesn’t make perfect, *practice makes permanent.* For example, you have been shampooing your hair for decades and yet *you are not getting any better at it.* (As a matter of fact, you will likely die never knowing whether there was a better shampooing technique.) The mere fact of doing something repeatedly does not help us improve.

What we need is practice—real practice, not mere repetition. As Michael Jordan said, “You can practice shooting eight hours a day, but if your technique is wrong, then all you become is very good at shooting the wrong way.” Practice makes permanent.

As kids, we were constantly practicing something: shooting a basketball, playing the piano, learning some Spanish. Those practices could be a drag—it’s the rare athlete who can’t wait for wind sprints—but because they were thoughtfully designed, they
came with a wonderful payoff: the certainty of improvement. From week to week, we couldn’t help but get better.

How did practice get squeezed out of our lives? Certainly the need hasn’t disappeared—practice is as critical for our performance in the office as it was for the playing field and the concert hall. There’s a long list of skills we’d all be wise to hone: *How to run a meeting that doesn’t drag on. How to listen (really listen) to your spouse. How to get through a stressful commute without barking out profanities.*

The enemies of practice are pride and fear and self-satisfaction. To practice requires humility. It forces us to admit that we don’t know everything. It forces us to submit to feedback from people who can teach us. But surely practice isn’t a sign of weakness—after all, some of the people most famously disciplined about practice are Michael Jordan, Jerry Rice, Roger Federer, Mia Hamm, and Tiger Woods. To practice isn’t to declare, *I’m bad.* To practice is to declare, *I can be better.*

And of course we’re all practicing *something* every day. Twenty-four hours of daily practice. We’re practicing the way we interact with our kids and the way we collaborate with our colleagues. The question is: Are we getting better? Are we plodding or are we practicing?

The fact that you bought this book suggests you’re a Practicer. If so, you’ve chosen the right handbook.

Prepare to get better at getting better.

—Dan Heath, *senior fellow at Duke University’s CASE center; co-author of* Made to Stick and Switch
RULE 31
NORMALIZE ERROR

When you punish your people for making a mistake or falling short of a goal, you create an environment of extreme caution, even fearfulness. In sports it’s similar to playing “not to lose”—a formula that often brings on defeat.
— JOHN WOODEN

We know a woman who is a breathtaking skier. She tells an interesting story about her breakthrough moment—and it was just that, a moment—when she started down the road of becoming an expert. It happened on the day she decided to fall. She was getting on the lift at the base of a steep, sunlit ski bowl. She had just come down a twisted, mogul-ridden trail in top form, earning the admiration of a teenager who’d been trailing behind her. At the bottom, amidst words like “stoked” and “killer,” the teenager asked, “Do you ever fall?” Getting on the lift, she realized that (1) the answer was no, and that (2) if the teenager had been a nephew or a cousin whom she felt invested in developing as a skier, she wouldn’t have wanted to admit that to him. Instead she would have pointed out that if you never fall, you aren’t pushing yourself and you aren’t improving as fast as you could be. Midway up the mountain she realized that she hardly ever fell, perhaps once every eight or ten days on skis, and even then it was usually at tangled moments when she wasn’t actually skiing that hard. She realized that if she wasn’t falling she probably wasn’t pushing herself to learn as hard as she could be. She had gotten lazy because she was so good.

When she got to the top of the mountain and skied off the chairlift, she knew what she needed to do. She set out to ski hard enough to fall, but she was intentional about how. She knew that there was one thing that she had been working on: pointing her shoulders face down the mountain, no matter how steep. She then set out to execute this skill even if that meant falling. She fell three times that first day. “I could feel myself trying to do exactly the
things I was afraid of. I knew if I stuck with it I would conquer my fears." She began skiing with a goal of falling. Within a few weeks she was a different skier entirely.

In that single moment, she was able to embrace two important truths: first, failure is normal and not the indicator of a lack of skill; second, failure really would make her better. She had to trust that exposing her weaknesses—risking ridicule and embarrassment—rather than trying to cover them up would be the driver of excellence. Compare our friend to a skier who just tries to ski the hardest runs as fast as he can. If he pushes himself to fall without encoding success, then he will fail miserably, likely leaning back too much on his skis and risking injury.

How do you build an organizational culture of fearless skiers willing to take thoughtful risks in order to improve—especially when the goal is to encode success? An organization has to help its people realize that failure rate and level of skill are independent variables; it has to help them feel comfortable exposing their weaknesses to their peers so they can help them improve; it has to make them feel trust and faith and even joy, not only to practice but to do so with others. The first step on that journey is to normalize error.

What does research tell us about error? *Moonwalking with Einstein* author Joshua Foer (Rule 23) found out. When Foer set out on a yearlong journey to improve his memory, he called on the "world’s leading expert on expertise,"3 Anders Ericsson, and "struck a deal." Foer gave Ericsson all of the records on his training for the United States Memory Championship. In exchange, Ericsson and his graduate students would share the data back with Foer in order to find ways to continue to improve his performance. This deal was extremely useful when Foer hit a plateau in his memory performance. Several months into his work of intense practice, his memory ceased getting better. Ericsson encouraged Foer to learn from other experts who, while engaging in "very directed, highly-focused" routines of deliberate practice, reach a
performance plateau—which Foer calls the “OK Plateau.” The key is to then practice failing.

To illustrate the OK Plateau, Foer describes the research on learning how to type. When first learning to type, we initially improve and improve until we ultimately reach a peak of accuracy and speed. Even though many of us spend countless hours typing in our professional and personal lives, we don’t continue to improve. Researchers discovered that when subjects were challenged to their limits by trying to type 10–20 percent faster than they were comfortably able to, and were allowed to make mistakes, then after a few days their speed improved. If Foer wanted to overcome his own performance plateau, he had to practice failing.

Applying this lesson to organizations is often easier said than done. Most organizations have a difficult relationship with error, and with good reason. Sometimes the results of error can be devastating, causing everything from a lost client, to debilitating press coverage, to massive product recalls. Even when the results would be minimal, it is common for many people in the workplace to be scared of making mistakes and even more terrified of anyone finding out. The challenge for organizations is to find appropriate ways to normalize error in the context of learning and practicing.

Here is what normalizing error looks like: first, challenge people and allow them to make mistakes, as we saw with the skier and the typist; second, respond to errors in a way that supports growth and improvement. You do this not by minimizing or ignoring mistakes that are made, but by supporting your people in fixing errors before they become too ingrained (Rule 8). This is a delicate balance, and for each organization and learning challenge it will look a bit different. To see how this balance can be achieved, let’s consider the classroom, a place where learning is front and center.

Something we have learned from watching great teachers is that they are very good at creating a classroom culture where error
is accepted as a normal part of learning; but these teachers don’t allow errors to go uncorrected. This means not downplaying the importance of an error, as in “That’s OK, sweetheart, that was a hard problem. It’s OK you got it wrong,” and not allowing wrong answers or inappropriate behavior to go unaddressed. When a third-grader reads a passage aloud with a few mistakes, her teacher will ask her to reread the sentence or phrase that was troubling: “Try reading that sentence again.” If the mistake persists, the teacher may prompt her with a decoding rule like “That sound is a short i.” Champion teachers will be relentless in ensuring that errors don’t go unaddressed and more inscribed, and they correct warmly and firmly. They allow for the rigor that self-corrections provide (as by having a student reread a challenging passage) but are direct when necessary (“That word is pronounced ‘diagram’”).

As in any culture, workplace, classroom, or other group, it is the accumulation of exchanges like these that will determine how everyone approaches error. When a student is encouraged both to fail and to try again, it has a profound effect on all students—how they view their work individually and how they support each other in their learning efforts. The classroom becomes a safe place to fail and a place where error is always corrected but not condemned; a place where success matters.

In this effort, it’s important that teachers, coaches, and managers “get past nice.” Often our initial impulse when addressing error is to come at it apologetically: “That’s OK, Sarah. That was a really hard one; you did your best.” Or, “I’m sorry to call you out on this.” This approach has a number of negative effects. It communicates lower expectations, that errors (and feedback!) are something you should apologize for, and finally that error is something to be avoided. When you do too much tap dancing around something that needs to be improved, people will think that it is a bigger deal than it really is. Be warm, be direct, get past nice, and make errors a normal part of practice.
How you frame error is critical. Finding the right language and hitting the right tone can have an amazing normalizing effect. Consider, for example, the following sentence starters:

- “I’m so glad you did that; it’s one of the most common mistakes that we make when trying $X$.”
- “You did that for all of the right reasons; what you need to look out for is $X$.”

Or bring in your own personal experience in learning a particular skill:

- “You just did what I did when I first learned $X$.”

How error is addressed can make a huge difference in a group’s culture. As people pick up on the language and the attitude it conveys, their approach to their own mistakes and the mistakes of others will change. Mistakes may increase but so will everyone’s expectations of themselves and each other.

Failing is susceptible to practice. We practice failure in our schools with our students. At the beginning of the year, we practice what happens when students make errors in judgment and get a consequence for misbehavior. We explicitly tell them how to respond; we model how students should respond to a consequence (for example, by keeping their head up and focusing on fixing their behavior); and then we have students practice how they will respond when they get a consequence. What does practicing failure look like in other settings? If you work in customer service, you could practice having a phone call with a customer in which the customer service representative has tried everything but the issue can’t be resolved. The only thing for the rep to do is practice apologizing and responding immediately when the customer asks...
to speak to a supervisor. What is the rule that we always learned when falling off a bike or a horse? Get back on. Practice how to respond to failure.

In this book we began our discussion on practice with the importance of encoding success. What is the relationship between the need to practice success and the need to normalize error? What you do in practice is practice succeeding. But when practice is well designed, you can also use it to isolate failure. This allows people to take calculated risks in order to improve at a particular skill. When failure happens in your organization, you want to have built a culture that embraces it. When you effectively normalize error, what starts with failure reliably ends in success. The process of encoding success is what makes failure safe.

**Normalize Error**

- Encourage people to challenge themselves and push beyond their performance plateaus by taking calculated risks in practice.
- Don’t minimize or ignore errors, or they will become too ingrained and people won’t learn from them.
- Help performers identify their own errors so that they can improve them independently.
- Practice responding to errors in an effort to prepare for and normalize mistakes.

**RULE 32**

**BREAK DOWN THE BARRIERS TO PRACTICE**

*What looks like resistance is often a lack of clarity.*

– DAN AND CHIP HEATH, *SWITCH*

Practice, especially when done in front of others, can be physiologically challenging. For many of us it can actually bring on