

## # Summary

Two years ago, Aaron Miller's wife welcomed their daughter, Lila, into the world . Miller: "There was so much to learn and so much craziness all at once" Miller: When the sleep deprivation kicked in, I had this thought and it was the same thought that parents crossed the ages internationally. And without this free time, I didn't know how I was ever going to do that ever again. And so I'm a big geek. I want to keep learning things .

The 10,000 hour rule came out of studies of expert level performance . Malcolm Gladwell wrote a book in 2007 called Outliers, the story of success . And the more deliberate practice, the more time that those individuals spent practicing the elements, whatever it is that they do . The folks at the tip top of their fields put in around ten,000 hours of practice .

It takes 10,000 hours to reach the top of an ultra competitive field in a very narrow subject, Dr. Anderson said . But that last statement is not true . People get good at things with just a little bit of practice, he says .

The story of the learning curve is when you start, you're grossly incompetent and you know it . With a little bit of practice, you get really good, really quick . But at a certain point, you reach a plateau and the subsequent gains become harder to get .

Get three to five resources about what it is you're trying to learn, but don't use them as a way to procrastinate on practice . If you practice the most important things first, you'll be able to improve your performance in the least amount of time possible . The third is to remove barriers to practice. Distractions, television, internet, all of these things that get in the way of you actually sitting down and doing the work .

The first thing about playing the ukulele is in order to practice, you have to have one . In most songs, you'll use four, maybe five chords, and that's it. That's the song. You don't have to know the hundreds as long as you know the four or the five chords .

Accessive Awesome says you can learn or you can play pretty much any pop song of the past five decades if you know four chords . Four chords pump out every pop song ever, right? So that was the first song I decided to learn. And I would like to actually share it with you .

It's not the process of you learning a bunch of little tips or tricks or things . The major barrier is emotional. We're scared. Feeling stupid doesn't feel good. And the beginning of learning anything new, you feel really stupid . But put 20 hours into anything. It doesn't matter. It only takes 20 hours. Have fun .

## ## Chapter 1

Hi, everyone. Two years ago, my life changed forever. My wife Kelsey and I welcomed our daughter, Lila, into the world. Now, becoming a parent is an amazing, amazing experience. Your whole world changes overnight and all of your priorities change immediately. So fast that it makes it really difficult to process sometimes. Now you also have to learn a tremendous amount about being a parent, like for example, how to dress your child. This was new to me. This is an actual outfit. I

thought this was a good idea. Even Lila knows that it's not a good idea. So there was so much to learn and so much craziness all at once. And to add to the craziness, Kelsey and I both work from home. We're entrepreneurs. We run our own businesses. So Kelsey is a developed courses online for yoga teachers. I'm an author. And so I'm working for home. Kelsey's working for home. We have an infant and we're trying to make sure that everything gets done, that needs done. And life is really, really, really busy. And a couple of weeks into this amazing experience, when the sleep deprivation really kicked in like around a week, eight, I had this thought and it was the same thought that parents crossed the ages internationally. Everybody has had this thought, which is, I am never going to have free time ever again. And somebody said it's true. Yeah, it's not exactly true, but it feels really, really true in that moment. And this was really disconcerting to me because one of the things that I enjoy more than anything else is learning new things, getting curious about something and diving in and fiddling around and learning through trial and error and eventually becoming pretty good at something. And without this free time, I didn't know how I was ever going to do that ever again. And so I'm a big geek. I want to keep learning things. I want to keep growing. And so what I decided to do was go to the library and go to the bookstore and look at what research says about how we learn and how we learn quickly. And I read a bunch of books, I read a bunch of websites and trying to answer this question, how long does it take to acquire a new skill? You know what I found? 10,000 hours. Anybody ever heard this? 10,000, it takes 10,000 hours. If you want to learn something new, if you want to be good at it, it's going to take 10,000 hours to get there. And I read this in book after book and website after website and my mental experience of reading all of this stuff. I was like, no. I don't have time. I don't have 10,000 hours. I am never going to be able to learn anything new ever again. But that's not true. So 10,000 hours just to give you a rough order of magnitude. 10,000 hours is a full time job for five years. That's a long time. And we've all had the experience of learning something new and it didn't take us anywhere close to that amount of time, right? So what's up? There's something kind of funky going on here. What the research says and what we expect and have experiences, they don't match up. And what I found, here's the wrinkle. The 10,000 hour rule came out of studies of expert level performance. There was a professor at Florida State University. His name is Kay Anders Erickson. He's the originator of the 10,000 hour rule. And where that came from is he studied professional athletes, world class musicians, chess grandmasters, all of these ultra competitive folks in ultra high performing fields. And he tried to figure out how long does it take to get to the top of those kinds of fields. And what he found is the more deliberate practice, the more time that those individuals spent practicing the elements, whatever it is that they do, the more time you spend, the better you get. And the folks at the tip top of their fields put in around 10,000 hours of practice. Now, we're talking about the game of telephone a little bit earlier. Here's what happened. And author by the name of Malcolm Gladwell wrote a book in 2007 called Outliers, the story of success. And the centerpiece of that book was the 10,000 hour rule. Practice a lot, practice well, and you will do extremely well. You reach the top of your field. So the message, what Dr. Anderson was actually saying is, it takes 10,000 hours to get the top of an ultra competitive field in a very narrow subject. That's what that means. But here's what happened. Ever since Outliers came out, immediately came out, reached the top of the best cellular list, stayed there for three solid months. All of a sudden, the 10,000 hour rule was everywhere. And a society-wide game of telephone started to be played. So this message, it takes 10,000 hours to reach the top of an ultra competitive field, became, it takes 10,000 hours to become an expert at something. Which became, it takes 10,000 hours to become good at something. Which became, it takes 10,000 hours to learn something. But that last statement, it takes 10,000 hours to learn something. It's not true. It's not true. So what the research actually says, if I spent a lot of time here at

the CSU Library in the cognitive psychology stacks, because I'm a geek. And when you actually look at the studies of skill acquisition, you see over and over and over a graph like this. Now researchers, whether they're studying a motor skill, something you do physically or a mental skill, they like to study things that they can time. Because you can quantify that, right? So they'll give research participants a little task, something that requires physical arrangement or something that requires learning a little mental trick. And they'll time how long a participant takes to complete the skill. And here's what this graph says. When you start, so when researchers gave participants a task, it took them a really long time, because it was new and they were horrible. With a little bit of practice, they get better and better and better. And the early part of practice is really, really efficient. People get good at things with just a little bit of practice. Now what's interesting to note is that if we don't really, for skills that we want to learn for ourselves, we don't care so much about time. Right? We just care about how good we are, whatever good happens to meet. So if we relate performance time to how good you are, the graph flips. And you get this famous and widely known, this is the learning curve. And the story of the learning curve is when you start, you're grossly incompetent and you know it. Right? With a little bit of practice, you get really good, really quick. So that early level of improvement is really fast. And then at a certain point, you reach a plateau and the subsequent gains become much harder to get. They take more time to get. Now, my question is, I want that. Right? How long does it take from starting something and being grossly incompetent and knowing it to being reasonably good? And hopefully, a short period of time, as possible. So how long does that take? Here's what my research says. 20 hours. That's it. You can go from knowing nothing about any skill that you can think of. Want to learn a language? Want to learn how to draw? Want to learn how to juggle flaming chainsaws? If you put 20 hours of focused, deliberate practice into that thing, you will be astounded. Astounded. That's how good you are. 20 hours is doable. That's about 45 minutes a day for about a month. Even skipping a couple days here and there. 20 hours isn't that hard to accumulate. Now, there's a method to doing this. Because it's not like you can just start flailing around for about 20 hours and expect these massive improvements. There's a way to practice intelligently. There's a way to practice efficiently that will make sure that you invest those 20 hours in the most effective way that you possibly can. And here's the method. It applies to anything. The first is to deconstruct the skill. Decide exactly what you want to be able to do when you're done. And then look into the skill and break it down into smaller and smaller pieces. Most of the things that we think of as skills are actually big bundles of skills that require all sorts of different things. The more you can break apart the skill, the more you're able to decide. What are the parts of this skill that will actually help me get to what I want? And then you can practice those first. And if you practice the most important things first, you'll be able to improve your performance in the least amount of time possible. The second is learn enough to self correct. So get three to five resources about what it is you're trying to learn. Could be books, could be DVDs, could be courses, could be anything. But don't use those as a way to procrastinate on practice. I know I do this, right? Get like 20 books about the topics. Like I'm going to start learning how to program a computer when I complete these 20 books. No, that's procrastination. What you want to do is learn just enough that you can actually practice and self correct or self edit as you practice. So the learning becomes a way of getting better at noticing when you're making a mistake and then doing something a little different. The third is to remove barriers to practice. Distractions, television, internet, all of these things that get in the way of you actually sitting down and doing the work. And the more you're able to use just a little bit of willpower to remove the distractions that are keeping you from practicing, the more likely you are to actually sit down and practice, right? And the fourth is to practice for at least 20 hours. Now, most skills have what I call a frustration barrier. You

know, the grossly incompetent knowing it part. That's really, really frustrating. We don't like to feel stupid. And feeling stupid is a barrier to us actually sitting down and doing the work. So by pre-committing to practicing whatever it is that you want to do for at least 20 hours, you will be able to overcome that initial frustration barrier and stick with the practice long enough to actually reap the rewards. All right, that's it. It's not rocket science. For very simple steps that you can use to learn anything. Now, this is easy to talk about in theory, but it's more fun to talk about in practice. So one of the things that I've wanted to learn how to do for a long time is play the ukulele. As anybody seeing Jake Shimabukuro's TED Talk where he plays the ukulele and makes it sound like he's like an ukulele god. It's amazing. It's like I saw this. That is so cool. It's such a neat instrument. I would really like to learn how to play. And so I decided that to test the theory I wanted to put 20 hours into practicing the ukulele and see where we got. And so the first thing about playing the ukulele is in order to practice, you have to have one. So I got an ukulele and my lovely assistant. Thank you, sir. I think I need the cord here. It's not just an ukulele. It's an electric ukulele. Yeah. So the first couple hours are just like the first couple hours of anything. You have to get the tools that you're using to practice. You have to make sure that they're available. My ukulele didn't come with strings attached. I had to figure out how to put those on. That's kind of important, right? And learning how to tune and learning how to make sure that all of the things that need to be done in order to start practicing, get done. Right? Now, one of the things when I was ready to actually start practicing was I looked in online to the bases and songbooks for how to play songs. And they say, OK, ukuleles, you can play more than one string at a time. So you can play chords. That's cool. You're accompanying yourself. Yeah, you. And when I started looking at songs, I had an ukulele cord book that had like hundreds of chords looking at the same. I was that's intimidating. But when you look at the actual songs, you see the same chords over and over, right? As it turns out, playing ukuleles is kind of like doing anything. There's a very small set of things that are really important and techniques that you'll use all the time. And so in most songs, you'll use four, maybe five chords. And that's it. That's the song. You don't have to know the hundreds as long as you know the four or the five. So while I was doing my research, I found a wonderful little medley of pop songs by a band called Accessive Awesome. And somebody knows it. And what Accessive Awesome says is that you can learn or you can play pretty much any pop song of the past five decades if you know four chords. And those chords are G, D, D minor, C. Four chords pump out every pop song ever, right? So I thought this is cool. I would like to play every pop song ever. So that was the first song I decided to learn. And I would like to actually share it with you. Ready? All right. Just a small town girl living in a lonely world. She took a midnight train going anywhere. I heard that you settled down. I found a girl that you're married now. Every night in my dreams, I see you. I feel you. That's just how I know it will go on. I won't hesitate no more, no more. It's cannot wait time yours. Because you are amazing. We did amazing things if I could. And I would go wherever you will. And try to feel the love tonight. And live with or without you. When I find myself, find myself in times of trouble. Mother Mary comes to me. Like I don't have a partner. No woman, no crap. I'm the mother. The shoulder is a dream. I come from a London under. Once a jolly swag man cams by a bill of bond. Hey, I just met you. And this is crazy. Now here's my number. To call me, hey, sexy lady. Whop, whop, whop, whop, whop, whop, whop, whop, I'm a dynamist. I want to say goodbye. Closing time. Every new beginning comes from some other beginning. And... Cheers. Cheers. Cheers. Cheers. Thank you. Thank you. I love that song. And I have a secret to share with you. So by playing that song for you, I just hit my 20th hour of practicing the ukulele. Thank you. And so it's amazing, pretty much anything that you can think of. What do you want to do? The major barrier to learning something new is not intellectual. It's not the process of you learning a bunch of little tips or tricks or things. The major barrier is

emotional. We're scared. Feeling stupid doesn't feel good. And the beginning of learning anything new, you feel really stupid. So the major barrier is not intellectual. It's emotional. But put 20 hours into anything. It doesn't matter. What do you want to learn? Do you want to learn language? Do you want to learn how to cook? Do you want to learn how to draw? What turns you on? What lights you up? Go out and do that thing. It only takes 20 hours. Have fun. Cheers. Very sad.

## ## Quotes

> "There was so much to learn and so much craziness all at once"

## ## Action Items