THE FIRST 20 HOURS

Mastering the Toughest Part of Learning Anything



THE FIRST 20 HOURS

How to Learn Anything . . . **Fast**

. . . .

JOSH KAUFMAN

PORTFOLIO / PENGUIN

PORTFOLIO / PENGUIN Published by the Penguin Group Penguin Group (USA) Inc., 375 Hudson Street, New York, New York 10014, USA



USA | Canada | UK | Ireland | Australia | New Zealand | India | South Africa | China

Penguin Books Ltd, Registered Offices: 80 Strand, London WC2R 0RL, England For more information about the Penguin Group visit penguin.com

Copyright © Worldly Wisdom Ventures LLC, 2013

All rights reserved. No part of this book may be reproduced, scanned, or distributed in any printed or electronic form without permission. Please do not participate in or encourage piracy of copyrighted materials in violation of the author's rights. Purchase only authorized editions.

Photographs by the author

Library of Congress Cataloging-in-Publication Data

Kaufman, Josh. The first 20 hours : how to learn anything . . . fast / Josh Kaufman. pages cm Includes bibliographical references. ISBN 978-1-101-62304-6 1. Expertise. 2. Learning, Psychology of. I. Title. II. Title: First twenty hours. BF378.E94K38 2013 153.1'5—dc23 2013007595

ALWAYS LEARNING

PEARSON

For Lela

Contents

Title Page **Copyright** Dedication A Note to the Reader 1 A Portrait of the Author as a Learning Junkie 2 Ten Principles of Rapid Skill Acquisition <u>**3**</u> Ten Principles of Effective Learning</u> <u>**4**</u> Yoga <u>5 Programming</u> 6 Touch Typing 7 <u>Go</u> 8 Ukulele 9 Windsurfing Afterword Acknowledgments Notes Index

A Note to the Reader

The lyf so short, the craft so longe to lerne. —GEOFFREY CHAUCER, PARLEMENT OF FOULES, 1374

...

There's so much I want to do . . . and so little time." The story of modern life.

Take a moment to consider how many things you want to learn how to do. What's on your list? What's holding you back from getting started?

Two things, most likely: time and skill.

Here's an uncomfortable truth: the most rewarding experiences in life almost always require some level of skill. Skills take time and effort to master—time we don't have, and effort we're reluctant to contribute.

"I'll get around to it someday, when I find the time."

It's easier to sit in front of the television or surf the web, frankly . . . so that's what most of us do, and our desires remain dreams.

Here's another uncomfortable truth: many things aren't fun until you're good at them. Every skill has what I call a *frustration barrier*—a period of time in which you're horribly unskilled, and you're painfully aware of that fact. Why start something when you know you're going to be bad at it?

Wouldn't it be great to be able to master new skills with less angst? To break through the frustration barrier quickly, so you can get to the rewarding part? To spend less time slogging through confusion and doubt, and more time having fun?

Is it possible to acquire new skills less painfully, in a way that requires far less time and effort?

I speak from experience: yes, it's possible.

This book is about my personal quest to test the art and science of *rapid skill acquisition*—how to learn any new skill as quickly as possible. The purpose of this book is to help you acquire new skills in record time.

In my experience, it takes around twenty hours of practice to break through the frustration barrier: to go from knowing absolutely nothing about what you're trying to do to performing noticeably well.

This book is a systematic approach to acquiring new skills as quickly as possible. The method is universal. It doesn't matter whether you want to learn a language, write a novel, paint a portrait, start a business, or fly an airplane. If you invest as little as twenty hours in learning the basics of the skill, you'll be surprised at how good you become.

Whatever skill you wish to acquire, this book will help you acquire it in less time and with less wasted energy. With a bit of focused, strategic effort, you'll find yourself performing well quickly, without the fist-pounding frustration.

In this book, we'll start with the principles of rapid skill acquisition: how to go about acquiring new skills as quickly as possible. These ideas and practices aren't complicated, so they won't take long to learn.

Then, I'll explain how to use these principles in the real world by showing you how I acquired the following six new skills in twenty hours or less each, with no more than ninety minutes of practice per day.

- Developing a personal yoga practice
- Writing a web-based computer program
- Relearning to touch-type
- Exploring the oldest and most complex board game in history
- Playing a musical instrument
- Windsurfing

I hope that this book encourages you to dust off your old "want to do" list, reexamine it, and commit to learning something new.

Josh Kaufman Fort Collins, Colorado, USA

For updates about the material in this book, visit http://first20hours.com/updates.

1

A Portrait of the Author as a Learning Junkie

I get up every morning determined to both change the world and have one hell of a good time. Sometimes this makes planning my day difficult. —E. B. WHITE, ESSAYIST AND AUTHOR OF *CHARLOTTE'S WEB* AND *THE ELEMENTS OF STYLE*

...

Hi. My name is Josh Kaufman, and I'm a learning addict.

My home and office shelves are piled high with books, tools, and unused equipment of all sorts, most of which are slowly accumulating dust.

I have a "to learn" list hundreds of items long. My Amazon.com shopping cart currently has 241 items in it—all books I want to read. I can't walk into a bookstore without leaving with three or four new books, to be added to the 852 volumes I already own.

Every day, I come up an idea for another project or experiment, which I add to my ever-growing "someday/maybe" list. Looking at everything I want to learn how to do feels overwhelming, so I don't look at the list very often.

I want to learn how to improve my publishing business. I want to learn how to shoot and edit videos. I want to produce an audio program. I want to learn how to give better seminars and teach better courses.

I have ideas for a new product, but I don't know how to build it. I have ideas for new computer programs, but I don't know how to create them. I have more potential writing project ideas in my head than the time and energy to write them.

I want to learn how to draw. I want to learn how to white-water kayak. I want to learn fly fishing. I want to learn rock climbing. I want to be able to play the guitar, the ukulele, the piano, and the electric violin.

There are games I've been interested in for years, like Go, but I haven't learned how to play them. I have games that I already know how to play, like chess, but I'm not very good at them, so they're not much fun, and I don't play them very often.

I like the idea of playing golf, but every game I've played turned into a stoic exercise in laughing off embarrassment. (I usually say I play marathon golf: by the end of eighteen holes, I've run a marathon.)

It seems as though every day I add some new skill to the list of things I want to be able to do, ad infinitum. So much to learn, so little time.

By nature, I'm a do-it-yourself kind of guy. If something needs to be done, I'd rather give it a go myself than look for help. Even if someone else could do it faster or better, I'm reluctant to rob myself of the learning experience.

To complicate matters, Kelsey, my wife, runs her own business, publishing continuing education courses for yoga teachers. Business is good for both of us, so there's always a lot to be done.

To make life even more interesting, we welcomed our daughter, Lela, into the world. Lela is nine months old as I write this.

Before Lela was born, Kelsey and I decided that if we were going to have kids, we wanted to make raising them ourselves a priority. One of the major reasons I quit my former management-track job at a Fortune 500 corporation was to have the flexibility to work from home, set my own schedule, and spend as much time as possible with my family.

Kelsey and I share parenting responsibilities equally. Since we're a twobusiness household, Kelsey works in the morning, while I take care of Lela. In the afternoon, Kelsey takes care of Lela, and I work until dinnertime. That gives me around twenty-five hours each week to work, plus whatever time I can snatch while Lela is napping.

After Lela was born, I felt like I barely had enough time to get my work done, let alone acquire new skills. For a learning addict, it was crazymaking.

I don't want to give up on learning and growth completely, even with my new responsibilities. I don't have very much free time, but I'm willing to invest what I have as wisely as possible.

That's what prompted my interest in what I call rapid skill acquisition: methods of learning new skills quickly.

I want to continue to acquire new skills, but I don't want the process to take forever. I want to pick up the essentials quickly, so I can make noticeable progress without constantly feeling frustrated.

I'm sure you can relate. How much "free" time do you have each day, after all of your work and family obligations are complete? Do you feel like you'd need thirty-six or forty-eight hours in a day to finally sit down and learn something new?

There's an old cliché: "work smarter, not harder." As it turns out, the process of skill acquisition is not really about the raw hours you put in . . . it's what you put *into* those hours.

Damn You, Malcolm Gladwell

In 2008, Malcolm Gladwell wrote a book titled *Outliers: The Story of Success*. In it, he set about trying to explain what makes certain people more successful than others.

One of the ideas Gladwell mentions over and over again is what he calls the "10,000 hour rule." Based on research conducted by Dr. K. Anders Ericsson of Florida State University, expert-level performance takes, on average, ten thousand hours of deliberate practice to achieve.¹

Ten thousand hours equals eight hours of deliberate practice every day for approximately three and a half years, with no breaks, no weekends, and no vacations. Assuming a standard 260 working days a year with no distractions, that's a full-time job for almost five years, assuming you spend 100 percent of that time exerting 100 percent of your energy and effort.

In practice, this level of focused attention is extremely taxing. Even world-class performers in ultracompetitive fields (like music performance and professional sports) can only muster the energy for approximately three and a half hours of deliberate practice every day. That means it can take a decade or more to develop a skill to mastery.

In essence, if you want to master a new skill, Dr. Ericsson's research indicates you're in for a very long haul. Being the best in the world at anything, even for a little while, requires years of relentless practice. If you're not willing to put in the time and effort, you'll be overshadowed by those who do.

Outliers shot straight to the top of the nonfiction bestseller lists, and stayed there for three months. Overnight, the "10,000 hour rule" was everywhere.

As if learning a new skill wasn't hard enough. Not only do you have to make time for practice . . . but you now also have to put in ten thousand hours? Most of us count ourselves lucky if we can set aside a few hours a week. Why bother at all if it takes so long to be good at something?

Look Upon My Works, Ye Mighty, and Despair!

Before you give up all hope, consider this.

There's an element of Dr. Ericsson's research that's very easy to overlook: it's a study of *expert-level performance*. If you're looking to become the next Tiger Woods, you'll probably need to spend at least ten thousand hours deliberately and systematically practicing every aspect of golf. Almost every single professional golfer began playing at a very young age and has been practicing nonstop for at least seven years. Developing world-class mastery takes time.

On the other hand, what if winning the PGA Tour isn't your goal? What if you just want to be good enough at golf that you're able to play decently, not embarrass yourself, have a good time, and maybe have a fighting chance to win your local country club tournament?

That's another matter entirely. World-class mastery may take ten thousand hours of focused effort, but developing the capacity to perform *well enough for your own purposes* usually requires far less of an investment.

That's not to discount the value of what Ericsson calls "deliberate practice": intentionally and systematically practicing in order to improve a skill. Deliberate practice is the core of skill acquisition. The question is how *much* deliberate practice is required to reach your goal. Usually, it's much less than you think.

Quality, Not Quantity

Embracing the idea of *sufficiency* is the key to rapid skill acquisition. In this book, we're going to discuss developing capacity, not world-class mastery. We're going to tackle the steep part of the learning curve and ascend it as quickly as possible.

Leave the ten thousand hours to the pros. We're going to start with twenty hours of concentrated, intelligent, focused effort.

We're shooting for the results we value with a fraction of the effort. You may never win a gold medal, but you'll reap the rewards you care about in far less time.

If you ultimately decide to master the skill, you'll have a better chance of success if you start with twenty hours of rapid skill acquisition. By knowing what you're getting into, learning the fundamentals, practicing intelligently, and developing a practice routine, you'll make progress more quickly and consistently, and you'll achieve expert status in record time.

What Is Rapid Skill Acquisition?

Rapid skill acquisition is a process—a way of breaking down the skill you're trying to acquire into the smallest possible parts, identifying which of those parts are most important, then deliberately practicing those elements first. It's as simple as that.

Rapid skill acquisition has four major steps:

- **Deconstructing** a skill into the smallest possible subskills;
- Learning enough about each subskill to be able to practice intelligently and self-correct during practice;
- **Removing** physical, mental, and emotional barriers that get in the way of practice;
- **Practicing** the most important subskills for at least twenty hours.

That's it. Rapid skill acquisition is not rocket science. You simply decide what to practice, figure out the best way to practice, make time to practice, then practice until you reach your target level of performance.

There's no magic to it—just smart, strategic effort invested in something you care about. With a little preparation, you'll acquire new skills rapidly, with less effort.

That's not to say that the results will be instant. The desire for instant gratification is one of the primary reasons people don't acquire new skills very quickly.

The "Matrix" Misconception

Remember the scene in *The Matrix* when Keanu Reeves opens his eyes, blinks a few times, and whispers "I know kung fu"?

Sorry to break it to you: rapid skill acquisition isn't *that* rapid.

Hollywood has done us a great disservice when it comes to skill acquisition. While it would certainly be nice to be able to learn how to pilot a Bell 212 helicopter in five seconds by uploading software directly into our brain, science is currently way behind science fiction.

Until brain uploads become a reality, "rapid" means taking considerably less time than it would typically take to learn a skill if you went about the process as most people do: blindly, haphazardly, and inconsistently.

One of the first professional skills I acquired was web development: being able to build useful, functioning websites. Beginning with a basic Angelfire.com website in 1996, I taught myself how to read and write HTML and CSS (the lingua franca of the web), use Adobe Photoshop to edit images, configure web servers, and maintain the systems that publish my work.

I didn't learn how to do these things in high school or college. Although I completed my undergraduate degree in business information systems, the overlap between what I learned in the classroom and what I do on a day-today basis is essentially nil.

I acquired the skill of web development by trying things at random and figuring it out as I went along. Every time I stumbled upon a new technique or tool that promised to enhance my website or reduce my workload, I experimented with it. Over a long period of time, my skills improved.

My haphazard approach to acquiring web development skills served the purpose: I got a job based on those skills, and I now publish information on the web for a living. Mission accomplished, from one perspective.

On the other hand, I learned everything the hard way. You could certainly reach my level of competence in these skills in much less than fifteen years if you approached the topic in a systematic way. If you went about practicing these skills intelligently, you could approach my general level of competence in a month.

That's what I mean by rapid skill acquisition. If you could learn most of what I know about web design in a single focused month versus fifteen years, that's a massive improvement. It's also well within the realm of possibility.

The amount of time it will take you to acquire a new skill is largely a matter of how much concentrated time you're willing to invest in deliberate practice and smart experimentation and how good you need to become to perform at the level you desire.

Don't expect overnight results. Do expect that your total time invested will be much, much less than it would otherwise be if you jumped into the process without a strategy.

Before we explore the method in detail, there's something you should know: rapid skill acquisition has nothing in common with how you "learned how to learn" in school. Academic learning and credentialing have almost zero overlap with skill acquisition, let alone achieving it quickly.

Skill Acquisition vs. Learning

Like many high school students in the United States, I studied a foreign language. Every school day for four years, I sat in a Spanish class. My marks were high: straight As.

Today, aside from saying *hola*, *cómo estás*, and *muy bien*, I can't hold a conversation with a native Spanish speaker to save my life. (I don't even know what to say if I'm *not* having a good day.)

On the other side of the spectrum, my friend, Carlos Miceli, grew up speaking Spanish in Argentina. In high school, Carlos decided he wanted to speak fluent English, so he made an effort to strike up as many conversations as possible with native-English speakers. In the process, he discovered Skype and set up his own website, so he could practice speaking and writing English regularly.

Carlos never took a class. He doesn't know the formal rules of English grammar. He can't even tell you *how* he knows English. That isn't really important. He can speak and write English fluently, which is what really matters.

Dr. Stephen Krashen, of the University of Southern California, is an expert in the area of second-language acquisition. One of Krashen's primary insights is that language *acquisition* is different from language *learning*.

In school, I learned a lot *about* Spanish. I learned thousands of vocabulary words, verb conjugation, and the rules of grammar. I learned all of these things well enough to pass the tests with flying colors.

Those tests, however, had nothing to do with my ability to exercise the skills of speaking Spanish intelligibly and understanding a native speaker talking at full speed. If my goal was to be able to speak Spanish fluently, a few weeks of trying to converse with people in Spanish would've produced better results than four years of schooling.

At that time, speaking Spanish fluently wasn't my goal. I just wanted to ace the final exam. Carlos, on the other hand, skipped the classroom and simply started practicing. Instead of doing verb conjugation drills, Carlos was practicing what really mattered: communicating with other people in English.

In terms of effectiveness and long-term value, Carlos's approach was far superior to mine. No contest.

The True Value of Learning

That's not to say learning about the skill you're acquiring isn't important. Learning can be extremely important, but not in the way you'd expect. Learning concepts related to a skill helps you *self-edit* or *self-correct* as you're practicing.

If you know how to conjugate verbs in Spanish, you're better able to self-correct your speech while talking to a native speaker. If you learn common vocabulary words, you're better able to understand what a native speaker is saying, as well as remember an appropriate word or phrase to use when you get stuck while speaking.

Dr. Krashen calls this the *monitor hypothesis*. Learning helps you plan, edit, and correct yourself as you practice. That's why learning is valuable. The trouble comes when we confuse learning with skill acquisition.

If you want to acquire a new skill, you must practice it in context. Learning enhances practice, but it doesn't replace it. If performance matters, learning alone is never enough.

Skill Acquisition vs. Training

There's also a huge difference between skill acquisition and training. *Training*, in this context, means improving a skill you've already acquired through repetition. It's what happens after you've acquired a basic skill if you want to keep improving.

Take running a marathon, for example. Most of us acquired the skill of running during childhood. Aside from putting one foot in front of the other and staying on your feet until you've covered 26.2 miles, there's not much in the way of new skills to acquire.

There is, however, a significant amount of necessary exertion required to strengthen your body and acclimate to the level of physical fitness it takes to complete a marathon. That exertion and strengthening process is training. The more you train, the stronger you become, and the faster you complete the marathon.

There's also an element of learning involved when running a marathon: how to sign up to participate in races, how to qualify for large events like the Boston Marathon, knowing what to expect as you run, pacing, useful equipment, et cetera.

For example, a small issue like friction between your shirt and your skin isn't a big deal if you're running a 5K, so most runners don't think about it. Unnecessary friction becomes a *huge* deal when you're running 26.2 miles.

Fail to prepare in advance and you're likely to experience the infamous "bleeding nipples" problem. It's painful, embarrassing . . . and entirely preventable. (Don't believe me? Google it.)

Training and learning will certainly make it easier to finish the race, but they're not skill acquisition. Without a certain amount of skill acquisition, training isn't possible or useful. Preparation and conditioning can make some forms of skill acquisition easier, but they can never replace practice.

Relearning how to run at a basic level, however, *is* skill acquisition. Techniques like ChiRunning² help the runner acquire the skill of moving in a way that minimizes effort and loss of forward momentum between strides. With a bit of practice, the runner can reacquire the core skill of running, which can then be reinforced in subsequent training.

Skill Acquisition vs. Education and Credentialing

Despite the high-minded efforts of teachers and professors around the world, modern methods of education and credentialing have almost nothing to do with skill acquisition.

Skill acquisition requires practicing the skill in question. It requires significant periods of sustained, focused concentration. It requires creativity, flexibility, and the freedom to set your own standard of success.

Unfortunately, most modern methods of education and credentialing require simple compliance. The primary (but unstated) goal isn't to acquire useful skills, it's to certify completion of a mostly arbitrary set of criteria, established by standards committees far removed from the student, for the purpose of validating certain qualities some third party appears to care about.

Creativity, flexibility, and freedom to experiment—the essential elements of rapid skill acquisition—are antithetical to the credentialing process. If the standards are too flexible, they're not really standards, are they?

Unfortunately, rigorous education and credentialing can actively *prevent* skill acquisition. The primary problem is opportunity cost: if the requirements to obtain the credential are so intense that they impair your ability to spend time practicing the skills in question, credentialing programs can do more harm than good.

Take a smart, motivated individual who is interested in starting a software company. Completing an undergraduate degree in computer science at a prestigious university usually takes at least four years.³

At the end of those four years, our newly minted graduate has spent thousands of hours learning algorithms and analyzing compilers well enough to pass dozens of examinations, but she is no closer to founding a software company than she was when she entered the university. Our unfortunate student has memorized many things about computer programming, at least temporarily, but she still doesn't know how to create a computer program that people find useful enough to purchase. Starting a software company requires acquiring new skills: learning programming languages, setting up and maintaining computer systems, researching available tools and programs, creating prototypes, finding early users, obtaining any necessary funding or financing, and handling common business administrative tasks.

Is there some overlap between starting a startup and obtaining an educational credential? Sure. But notice the emphasis: most of the effort of obtaining a credential is devoted to the process of meeting the requirements. Whether or not those requirements actually help you acquire the skills you need to perform in the real world is a tertiary concern at best.

In my first book, *The Personal MBA: Master the Art of Business* (2010), I explained why I decided to skip graduate-level business education in favor of teaching myself the principles of modern business practice and starting my own company. By avoiding business school, and spending my time actually building businesses instead, I learned a ton, and saved over \$150,000 in the process. Given what I wanted to accomplish, dedicating time to business skill acquisition on my own was better than business school in every respect.

If you want to get good at anything where real-life performance matters, you have to actually practice that skill in context. Study, by itself, is never enough.

The Neurophysiology of Skill: Brain Plasticity and Muscle Memory

One last thing before we jump into the nuts and bolts of rapid skill acquisition: you must fully appreciate the fact that you're capable of acquiring new skills.

That seems like an odd thing to say, but it's easy to believe your skills are fixed—that you're either good or talented or gifted at something . . . or you're not.

In *Mindset: The New Psychology of Success* (2007), psychologist Carol Dweck cites a wide body of research that indicates individuals commonly hold one of two views of how their minds work.

According to Dr. Dweck, people with a "fixed" mind-set assume that skills and talents are innate, that you're born with certain abilities that are what they are. If a person with a fixed mind-set is "not good at math," then extra effort practicing math is a waste. Why bother if you're never going to be good at it?

People with a "growth" mind-set, on the other hand, assume that skills and abilities grow with practice and persistence. If a person with a growth mind-set gets a few math problems wrong, it's not because they're not blessed with good-at-mathness; it's because they haven't practiced enough. With persistence and practice, it's only a matter of time before they will master the technique.

Here's the good news if you find yourself falling into the fixed mind-set trap: a wide (and growing) body of research indicates that all brains are capable of improving skills and capabilities with practice. Genetic predispositions exist, but they're very minor compared to the power of focused, intelligent practice. You can improve any skill, provided you're willing to practice.

The human brain is *plastic*—a term neuroscientists use to indicate that your brain physically changes in response to your environment, your actions, and the consequences of those actions. As you learn any new skill,

physical or mental, the neurological wiring of your brain changes as you practice it.

In the words of Dr. Jon Medina (*Brain Rules*, 2009) "neurons that fire together wire together," forming unique new patterns in the physical circuitry of your brain. Over time, your neurons begin to fire in more efficient patterns in response to the feedback you receive from your environment as you practice.

If you're working on a *motor skill* (that is, a skill that involves physical movement), you're always relatively awkward and slow at first. You have to think about everything you're doing, and you often make frustrating mistakes. Learning the basics is a constant struggle.

As you practice, your muscle coordination becomes more automatic and synchronized with your mental processes. You gain the ability to pay more attention to the subtle elements of what you're doing, and you learn to adjust your approach to the feedback you get from the environment.

You start doing more of what works, and less of what doesn't. Eventually, you're able to perform without conscious attention to every detail.

In academic literature, this general process is called the "three-stage model" of skill acquisition,⁴ and it applies to both physical and mental skills. The three stages are

1. Cognitive (Early) Stage—understanding what you're trying to do, researching, thinking about the process, and breaking the skill into manageable parts.

2. Associative (Intermediate) Stage—practicing the task, noticing environmental feedback, and adjusting your approach based on that feedback.

3. Autonomous (Late) Stage—performing the skill effectively and efficiently without thinking about it or paying unnecessary attention to the process.

This neurophysiological skill acquisition process is happening all the time, even while you're reading this sentence. There is no such thing as a

mind in stasis. Your brain is learning, encoding, and consolidating new skills all the time.

As Dr. Dweck says in *Mindset*: "Your mind is like a muscle: the more you use it, the more it grows." The more you practice, the more efficient, effective, and automatic the skill becomes.

That's great news when it comes to rapid skill acquisition. If your mind and body are capable of learning to perform in new and better ways, we can figure out how to make that process *faster*.