Eight Minutes, Not Eight Hours

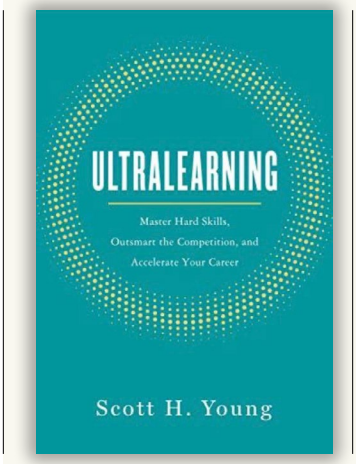
March 2025

Ultralearning

Master Hard Skills, Outsmart the Competition, And Accelerate Your Career

BOOK AUTHOR: **SCOTT YOUNG**

Published 2019



Now is the time to revisit your desire to play that instrument, speak a new language, or develop computer programming software. Author Scott Young reviews the exceptional work of both geniuses and ultralearners (including his own) and observes the common principles exercised in each project. Citing scientific literature to explain why these people learn better than others, Young inspires his readers to adopt this self-directed and intense strategy of learning, called ultralearning.

Though we may not commit to learning a four-year MIT curriculum in under a year like Young, we can apply his nine principles of successful ultralearning to gain deep knowledge and develop expertise quickly. Maximize your organization's competency by encouraging others to learn aggressively and seek ultralearning projects of their own interest.

KEY QUOTE

"Doing drills is hard and often uncomfortable. Teasing out the worst thing about your performance and practicing that in isolation takes guts. It's much more pleasant to spend time focusing on things you're already good at" (p. 114).

KEY POINTS AND CONCEPTS

The Value of Ultralearning

With advancing technology, the income inequality gap is growing. High-skilled jobs and low-skilled jobs continue to increase, but technology is taking over many middle-skilled jobs.

Higher education tuition is not cheap. Through ultralearning projects, you can learn professional skills needed to succeed in high-skilled jobs. Learn multiple, and you will find yourself at a unique advantage over other people in the profession. With this self-directed learning, you decide what and how you learn.

Ultralearning is not easy. It is uncomfortable and challenging. But once you start your first project, you discover confidence in doing things you couldn't do before. You will crave more and more learning when you finish.

The Power of Metalearning

Metalearning is learning how to learn your skill. "[László] Polgár devoted himself full-time to understanding how people learn chess and under what conditions his daughters would thrive" before beginning his project to raise three world-class chess players (p. 245).

Make sure you can answer why you want to learn this skill. Then reach out to an expert who has achieved this goal to see if learning this skill will accomplish your goal. If it will, create a rough list of what you will need to learn including the concepts, facts, and procedures. Research how other people have learned this skill or subject and follow their recommendations or courses.

"Invest approximately 10 percent of your total expected learning time into research prior to starting" (p. 66). Throughout your project, you may need more metalearning to stay on track.

On Focusing

We procrastinate because either the task at hand is unpleasant or another task is more desirable. Recognize when and why you procrastinate and establish crutches that aid you to act instead of wait. Since distractions typically dissipate within five minutes, telling yourself to get through only five minutes of the task before taking a break can be enough to keep you going for longer than five minutes. You can also try the twenty-five minutes on, five minutes off technique if you exploit the five-minute rule too often (pp. 75-76).

"We procrastinate because either the task at hand is unpleasant or another task is more desirable. Recognize when and why you procrastinate and establish crutches that aid you to act instead of wait."

Distractions happen, but learn to lessen their impact. Be more productive by turning the TV off in the background. While reading, try writing notes at the same time to keep your focus on the page. When feelings of anxiety or negativity step into your mind, address these emotions then let them pass; come back gently to your task. Strengthening your ability to persist on a task will be crucial to your long-term success.

Create an optimal arousal level for the right kind of focus. Exercise increases energy and gives you a "keen alertness, which is often characterized by a fairly narrow range of focus," best used for tasks with an "intense concentration toward a small target," such as shooting a basketball (p. 84). In contrast, a lower arousal state is more effective in complex or creative tasks that require a more relaxed kind of focus.

On Directness

"The first step is to practice the skill directly. This means figuring out where and how the skill will be used and then trying to match that situation as close as is feasible when practicing. Practice a language by actually speaking it [in an environment where the language is spoken]. Learn program writing software. Improve your writing skills by penning essays" (p. 112).

Your learning will transfer better to real-life situations the more you practice your skill in a direct, real-life context. If you don't have the exact environment to practice your skill, create an artificial one that uses the same mental processes. Roger Craig's project to win Jeopardy! involved generating games from past questions which simulated the same cognitive features of the real-life game. He went on to create show history for the highest single-day winnings.

Drill, Direct, Drill

Before Benjamin Franklin became an international best seller for Poor Richard's Almanack, he aggressively performed writing skills by directly publishing essays. To increase the speed of his learning, he sliced his writing into pieces (word choice, rhetoric style, etc.) to strengthen the weak parts, also known as the bottlenecks that limit your progress. "By identifying components of the overall skill of writing, figuring out which mattered in his situation, and then coming up with clever ways to emphasize them in his practice, he could get better more quickly than if he had just spent a lot of time writing" (p. 110).

"By identifying components of the overall skill of writing, figuring out which mattered in his situation, and then coming up with clever ways to emphasize them in his practice, he could get better more quickly than if he had just spent a lot of time writing."

"Which aspect of the skill, if you improved it, would cause the greatest improvement to your abilities overall for the least amount of effort?" (p. 113). Identify your rate-limiting step and concentrate on this aspect alone; copy the rest of the skill from someone else. Once you get better at the individual component, go back to directly learning the overall skill.

"Doing drills is hard and often uncomfortable. Teasing out the worst thing about your performance and practicing that in isolation takes guts. It's much more pleasant to spend time focusing on things you're already good at" (p. 114).

Retrieval and Recall

Do not wait until you're "ready" to test yourself. Close your book or notes and try retrieving the information from memory, even when you're not comfortable with the material, yet. This difficulty will make you strongly remember the information (p. 126).

Passively reviewing concepts is not enough. After reading a chapter, close the book and write everything that you can recall on a blank piece of paper. Use flash cards. Instead of taking notes verbatim from the text, ask yourself what the big picture is and write your answer down (pp. 130-132).

Seeking Feedback

"Fear of feedback often feels more uncomfortable than experiencing feedback itself.... Ultralearners acquire skills quickly because they seek aggressive feedback when others opt for practice that includes weaker forms of feedback or no feedback at all" (p. 140). You will stop overreacting emotionally to inappropriate feedback and learn to filter the noise the more you expose yourself to it.

Outcome feedback lets you know how you are doing – an audience applause, a class grade, product sales. Informational feedback tells you what you are doing wrong; the weird facial reaction to a joke you made informed you that it wasn't funny. Corrective feedback tells you what you are doing wrong and how to fix it, like flash cards. This third feedback, given by a mentor, coach, or expert of the skill, is the best type of feedback (pp. 141-145). Allow this two-way communication to promote further learning.

On Retention

Scientists propose that humans forget because of time, competing memories, and inaccessible memories. Ultralearners combine four methods to retain what they learn.

"Scientists propose that humans forget because of time, competing memories, and inaccessible memories. Ultralearners combine four methods to retain what they learn."

"Space your study sessions too closely, and you lose efficiency; space them too far apart, and you forget what you've already learned" (p. 165). Author Scott Young used spacing to increase long-term memory retention. "I switched from doing one class at a time to doing a few in parallel, to minimize the impact that the crammed study time would have on my memory" (p. 165). Your long-term memory stores better when you study for one hour every day for ten days than study for ten hours in one day. You can find spaced-repetition software online that spaces practice for long-term retention.

You can overlearn through repetitious practice until you proceduralize the process, like typing on a keyboard.

Mnemonics take time to create and can often be a hassle to recall in real-time. Nevertheless, they transform dense or abstract information into retrievable facts. Supplement your learning with mnemonics.

Building Intuition

Practice with problem solving and push yourself to figure out the solution on your own before you give up; even give yourself hints before you give up. Once you acquire enough experience, you recognize certain patterns in different types of problems. Then, when you approach a problem you have never seen, you can use your intuition to recognize the principles behind the problem instead of focusing on superficial details (p. 184).

Science says that we think we understand more than we actually do. For example, adults claimed they knew how a bike looked, but when asked to draw a sketch of a bike, "the illustrations clearly show, most participants had no idea how the machines were assembled, even though they used them all the time and believed they understood them quite well" (p. 188). Demonstrate things to prove you understand them.

To develop intuition about the topic you are learning, teach the idea to someone else. "When you get stuck, meaning your understanding fails to provide a clear answer, go back to your book, notes, teacher, or reference material to find the answer" (p. 192).

Experimenting

"As your skill develops, it's often no longer enough to simply follow the examples of others; you need to experiment and find your own path" (p. 203).

Start by copying expert techniques, styles, and use of resources, then allow your own creativity to take over.

Experiment with different learning techniques side-by-side and use feedback to understand which method works better for you.

If you find yourself in the habit of using the same method over and over to solve problems, challenge yourself with new constraints that force you to develop a new method of solving.

"Only by experimenting will you be able to find the right trade-offs between different principles—for instance, when directness is more important and when you should focus on drills or whether retention or intuition is the main obstacle to learning."

"Only by experimenting will you be able to find the right trade-offs between different principles—for instance, when directness is more important and when you should focus on drills or whether retention or intuition is the main obstacle to learning" (p. 213).

Your First Ultralearning Project

Your first project will take the most time to plan, but "planning ahead will avoid a lot of problems and prevent you from having to make drastic changes to your learning plan before you've even started making progress" (p. 217).

Before you start your ultralearning project:

- Know what topic you want to learn. Start with a narrow scope.
- Identify and collect any necessary resources, like books or possible mentors.
- Find the benchmark for typical learning of this skill.
- Locate or create a learning environment to directly practice your skill.
- Look at backup resources that might be useful later.

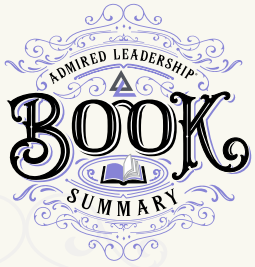
Establish how much time you will spend on your project, when you will learn, and how long you will make the project. Young prefers shorter commitments to longer ones given the inevitable interruptions of life. Put this information in your calendar. “If you’re unwilling to put time into your calendar, you’re almost certainly unwilling to put in time to study” (p. 221).

Execute your project and review the results for improvements in future projects.

Inspire others to design an ultralearning project of their own interest and create this culture of learning within your organization. Give workers the opportunity to spend a fraction of their time above their current abilities; you may reveal talent otherwise unknown. Uphold an ultralearning spirit by keeping motivation high; place highly adept workers in a competitive environment and recommend low-experienced workers a unique project that prevents comparison to others (pp. 250-254).

Young, S. (2019). **Ultralearning:** ***Master Hard Skills, Outsmart the Competition, And Accelerate Your Career.*** New York: HarperCollins Publishers. .

“Inspire others to design an ultralearning project of their own interest and create this culture of learning within your organization. Give workers the opportunity to spend a fraction of their time above their current abilities; you may reveal talent otherwise unknown.”



The Latest and Greatest Books for Leaders

We work hard to stay abreast of the current writings on leadership, especially those books our clients are reading or have been recommended to read. As a benefit to our clients and to facilitate our own learning, the Admired Leadership® team has long maintained a tradition of summarizing the newest books of interest to leaders. Better to read a summary for eight minutes before investing 8 hours in the entire book. After reading a good summary, we believe leaders are able to make better choices as to what to ignore, what to peruse and what to make the time to read closely.

Admired® LEADERSHIP