



**meta**learn

# **MAKE ME A METALEARNER**

**Master the process of accelerated learning  
to ace school, fast-track your career  
and pick up new skills in record time.**

**Nasos Papadopoulos**

# SECTION 1A: CHOOSING YOUR SKILL

## EXERCISE 1) PERSONAL INVENTORY

This section is about assessing your strengths and weaknesses, your existing skills and knowledge and your likes and dislikes before choosing your skill.

### STRENGTHS & WEAKNESSES

What existing skills and knowledge do I have?

What are my strengths and weaknesses?

What are my likes and dislikes?

### LIMITS & CONSTRAINTS

Are there any limiting beliefs holding me back from doing what I want?

Are there any areas of knowledge or any skills I no longer need to keep developing?

### THE WORLD AROUND YOU

What direction is the world going in?

What are some of the biggest needs that people around me seem to have?

Where are the big opportunities that will come in the next 10-20 years?

## EXERCISE 2) CHOOSE YOUR SKILL

For a few minutes, clear your mind. If you could learn anything at all, what would it be? Forget all the constraints (time, money, relationships, obligations) you usually place on yourself and write **everything** down that comes to mind.

If you're struggling with ideas it can help to brainstorm across the different areas of your life:

- 1) Do you want to learn a new skill to develop your career?
- 2) Do you want to learn something to improve your fitness and health?
- 3) Do you want to pick up a new hobby – like playing the guitar or picking up a game like chess?
- 4) Do you want to build a side business that will generate extra income?
- 5) Do you want to learn about a new field of knowledge – like science or philosophy – for an intellectual challenge?

### Things I Want To Learn

Now go back to the list you just wrote down and of all the skills you've written down, **pick one**. Add the rest to the future projects section.

### Future Projects

### My One Skill

## EXERCISE 3) CLARIFY YOUR MOTIVATION

Now start thinking about why you want to learn your skill and write down all the reasons you can think of.

Ask Yourself:

- 1) How will learning this tangibly improve my life? (What's the ROI?)
- 2) What experiences will learning this allow me to enjoy?
- 3) Who will I be able to share my experiences with by learning this?
- 4) How will learning this make me feel?
- 5) What type of a person will I become by learning this?

### Reasons For Learning My Skill

## EXERCISE 4) SET YOUR GOAL & VISUALISE THE OUTCOME

Set a goal for your skill that defines what "good enough" looks like for you.

*If you need some help, for learning Spanish, I settled on the following goals:*

**1) Hold a 60-minute conversation with a native Spanish speaker, without using another language at any point, by 30 June 2017**

*This goal is clear and measurable but is also challenging and inspiring for me personally, which makes me far more likely to follow through.*

My Goal for Learning is:

### Bonus Tip

**If you know someone who has learned your skill before, speak to them to get a feel for what a reasonable goal might be (But don't use this as an excuse to procrastinate!)**

Now that you've defined your target performance level, I want you to create a clear vision of what that looks like and the benefits you hope to enjoy.

*If you need some help, for my language learning goal I can imagine myself walking through a street market in Barcelona and joking with the owner as I pay for some food, or picking up a lively conversation with a beautiful girl in a bar in Buenos Aires, with Latin music in the background. You get the picture.*

## SECTION 1B: LEARNING PREFERENCES

The point of these activities is not to put yourself in a box and only try and learn through one method. It's to develop a greater awareness of how you learn and which activities you have a preference for. By paying more attention to these distinctions to see what works for you, you'll become more aware of your own abilities.

### EXERCISE 1) IDENTIFY YOUR LEARNING PREFERENCES

Take a moment to reflect on your own learning experience – think about the learning strategies you've used in the past.

What's a learning experience you've had that worked well? Why did it work?

What's a learning experience you've had that didn't work? Why didn't it work?

Now consider what your current learning strategies would be for learning new skills and answer the following questions:

If I asked you to go and learn about the ideas of a philosopher now, how would you go about it? What would you do first?

If I asked you to go and learn a piece of software you've never used before e.g. Adobe Creative Suite, how would you do it?

How would you learn your skill of choice, off the top of your head? (remember, there is no right answer here!)

## EXRCISE 2) IDENTIFY YOUR DOMINANT INTELLIGENCE TYPE(S)

Howard Gardner of Harvard has identified seven distinct intelligences.

### 1) Visual-Spatial

Ability: Good spatial judgment and the ability to visualize well

Preferred Careers: Architect, Designer, Illustrator

Preferred Activities: Drawing, thinking in terms of physical space

Preferred Learning Mode: Drawings and imagery

### 2) Bodily-Kinesthetic

Ability: Coordinating mind with body, a sense of timing and handling objects

Preferred Careers: Athlete, Dancer, Actor, Craftsman

Preferred Activities: Movement, Making Things, Performing

Preferred Learning Mode: Physical activity and role playing

### 3) Musical-Rhythmic

Ability: Sensitivity to sounds and their pitch, tone and rhythms

Preferred Careers: Musician, Voice Actor, DJ

Preferred Activities: Singing, playing instruments, composing music

Preferred Learning Mode: turning information into lyrics, speaking rhythmically, tapping out time

### 4) Interpersonal

Ability: "Sensitivity to others' feelings and motives and able to work as part of a group"

Preferred Careers: Salesman, Politician, Manager, Teacher

Preferred Activities: interacting with others, discussion and debate

Preferred Learning Mode: group activities, seminars, dialogue

### 5) Intrapersonal

Ability: Understanding yourself, what you feel and what you want

Preferred Careers: Coach, Therapist, Social Worker

Preferred Activities: Reading, reflection, and introspection

Preferred Learning Mode: independent study and introspection

### 6) Verbal-Linguistic

Ability: Using words effectively, communicating well with language

Preferred Careers: Author, Copywriter, Translator, Journalist

Preferred Activities: reading, writing, telling stories

Preferred Learning Mode: saying and seeing words, reading books

### 7) Logical-Mathematical

Ability: Quantifying things, making hypotheses, reasoning and calculating

Preferred Careers: Data Scientist, Coder,

Preferred Activities: Exploring patterns and relationships

Preferred Learning Mode: logic games, investigation, experimentation

### 8) Naturalistic

Ability: Understanding living things and reading nature

Preferred Careers: Chef, Botanist, Biologist, Conservationist

Preferred Activities: Classifying natural forms

Preferred Learning Mode: Relating information to one's natural surroundings

**Action:** Take a moment to consider which combination of these intelligences describes you best and jot down your thoughts below

## EXERCISE 3) IDENTIFY YOUR INFORMATION TYPE: SPEAKING VS. LISTENING VS. READING VS. WRITING

When it comes to consuming information it's useful to consider your preferences between reading, listening, writing and speaking.

Take a moment to consider your preferences and jot down your thoughts:

### **My Preference**

*I feel that I learn best in most areas through a combination of writing, discussion and speaking. I find writing valuable as a way of structuring thoughts, discussion as a great way of drawing new insights and speaking as a great way of bringing everything together.*

*Does that mean I don't listen or read? Absolutely not, but after plenty of experimentation I'm becoming more and more aware of what works best for me and what doesn't. And that should be your goal too...*

### **Examples**

#### **Dwight Eisenhower - Reader**

Dwight Eisenhower was a reader – he made sure that every question from the press was presented in writing before a conference was due to start so that he could read through it extensively.

#### **Lyndon Johnson - Listener**

Lyndon Johnson was a listener – he excelled as a parliamentarian, which required him to respond to questions in the moment and was always able to capture the core ideas in discussions with other leaders.

#### **Winston Churchill - Writer**

Winston Churchill was a writer – he did poorly in school because he didn't learn that well by reading and listening; but he wrote some of the most stirring speeches in history, and always organised his thoughts in writing.

#### **Albert Einstein - Speaker**

Albert Einstein was a speaker – despite spending long periods of time working in isolation, he would continuously repeat his own ideas to himself softly and processed a lot of what he learned by talking to other physicists.

## EXERCISE 4) IDENTIFY YOUR SOCIAL TYPE INTROVERT VS. EXTROVERT

### Introverted Learners

Introverted learners significantly prefer to study in isolation and develop a core level of skill in something in the comfort of their own home or office. This type of learner is likely to be more self-conscious about their performance level when first starting (although this is something we all experience.)

### Extroverted Learners

Extroverted learners enjoy the additional accountability and connection that joining a community brings and choose to do so from an earlier stage. This might involve taking a group class or signing up to a local society that allows them to practice their skill with others on a regular basis.

**Action:** Take a moment to consider where you lie on this spectrum of introversion/extroversion and jot down your thoughts below:



### My Preference

*For me, the process of learning with other people is part of the fun and I enjoy the fast feedback loops that I get from practicing with other people in communities.*

*However, I also value the process of focusing in isolation when there's something specific I need to focus on, or when I'm just taking a couple of minutes to reflect on my progress.*

## EXERCISE 5) IDENTIFY YOUR TEACHING TYPE: STUDENT VS AUTODIDACT

### Students

Students want to have teachers from the get go – people who can guide them from the start and give them regular feedback on how they're performing. This type of learner may also naturally be drawn to modelling other successful learners and trying to replicate their process.

### Autodidacts

Autodidacts teach themselves using the resources available to them – books, podcasts, videos and other sources. They try to work out as much as possible for themselves, which is often related to their confidence in their own methods. However, this doesn't mean that they never use teachers!

**Action:** Take a moment to consider whether you're more of a student or autodidact and jot down your thoughts below:

## EXERCISE 6) IDENTIFY YOUR CHRONOTYPE: LARK VS. OWL

**Larks** – Most productive early in the morning, struggle to perform late at night

**Owls** – Most productive late at night, struggle to get up in the mornings

**ACTION:** Take a moment to consider whether you're more of an owl or a lark and jot down your thoughts below

### Bonus Tip

If you're not sure whether you're more of an owl or a lark, track your energy levels during the day and try experimenting with a learning project at different times. So if you're learning to play the guitar, alternate between practicing for 15 minutes in the morning and evening and get a feel for what works best.

### My Preference

*I've actually found my chronotype shifting recently - in the past I've been more of a lark but have found myself moving more and more towards the hours of an owl recently, for reasons I can't really explain!*

## 3 INSIGHTS ABOUT THE BRAIN

### 1) Neuroplasticity & Desirable Difficulty

Work by Norman Doidge, which built on the ideas of psychologist William James, has proved that the adult brain is plastic – it can change structure through our perception of the world, our experiences and our imagination.

This means the brain can be changed in the same way a muscle can. The harder you train a muscle in the gym, the bigger it grows. The harder you train your brain by learning, the more it changes to form new connections.

This is cognitive scientist Robert Bjork's desirable difficulty principle - real learning should feel difficult in the same way as straining your muscles.

### 2) Hebb's Law & Memory

Hebb's Law states that neurons that fire together wire together and this means that by linking new information to existing knowledge we're wiring up multiple neurons, which improves our ability to remember.

In terms of the limitations of memory, scientists now see the process of forming a memory as being closer to inscribing a mark in clay than writing on paper with ink.

What this means is that memories are malleable - every time you access a memory, the message can get smudged, just as a clay tablet might if you were to pick it up and run your fingers over its surface says André Fenton, a neuroscientist at New York University's Center for Neural Science.

### 3) Metacognition & Decisionmaking

Dozens of books and hundreds of research articles in the last 10 years have examined the factors influencing our decisions and metacognition - the way we think about our thinking. The most notable of these coming from Nobel Prize winning psychologist Daniel Kahneman's *Thinking Fast and Slow*.

His work popularized the idea that the brain has two distinct mechanisms for decisionmaking - an automatic, unconscious way of thinking known as "system 1," and a more deliberate approach dubbed "system 2."

By drawing attention to our brain's strengths and weaknesses, Kahneman has helped us to understand the common mistakes we are all vulnerable to and how best to avoid them to make better decisions.

# METALEARNING STRATEGIES

As series of strategies follow from these principles

## 3 STRATEGIES FROM DESIRABLE DIFFICULTY

### 1) RETRIEVAL PRACTICE

Retrieval practice is the process of trying to actively recall information before looking at the answer. Commonly used learning strategies like rereading may feel effective due to the feeling of fluency they cause but they are useless.

Why is retrieval so effective?

According to the principle of desirable difficulty, effective learning techniques are effortful. So forcing yourself to remember an idea before looking it up may feel harder but it will lead to a stronger memory in the long run.

3 Ways To Use Retrieval

#### 1) Do It Before You're Ready

Instead of waiting for the perfect moment, test yourself before you feel comfortable. If you're learning a language, find a native to practice as soon as possible. If it's a sport, get some competitive practice in.

#### 2) Quiz Yourself

After reading an article or text, pause and ask: what are the key ideas here? What message is the author is trying to communicate? Then try and write down as much as you can remember, without looking.

#### 3) Teach Someone

After reading an idea for the first time, try to explain it to a friend or family member as soon as possible. If nobody's around explain it out loud to yourself. You'll quickly see where your knowledge falls short and what you need to review.

**ACTION – Write down how you can you use testing in learning your skill**

## 2) SPACED REPETITION

Spaced repetition is studying something more than once and leaving longer and longer gaps between sessions. We're taught that repeated exposure aka Massed Practice burns it into our long-term memory. But while this might work the day before an exam, you'll forget it in a few days!

Why is Spaced Repetition so effective?

With short study intervals, your brain gets bored. So if you keep repeating that the Battle of Hastings was in 1066, your brain ignores it. But by testing yourself at progressively longer intervals, you forget more, which means your brain has to work harder to remember, which leads to more effective learning.

### 3 Ways To Use Spaced Repetition

#### 1) Organise Your Information

Gather your info and break it into chunks, whether that's words in a language or scientific definitions.

#### 2) Build Your Flashcards

Take your chunks of info and add them to flashcards using physical index cards or apps like Anki.

#### 3) Test Yourself

If you're using physical flashcards, you'll need to build a self-quizzing schedule and if you're using apps they'll take care of the spacing for you.

**ACTION – Write down how you can use spaced repetition in learning your skill**

### 3) MIXED PRACTICE

Mixed practice is practicing a series of skills at once rather than focusing on one at a time in blocks. Blocked practice gives us the feeling that we're improving quickly whereas mixed practice feels more difficult so our intuition tells us to avoid it.

Why is Mixed Practice so effective?

Mixed practice improves your ability to discriminate between problem types and choose the right solution. This improves performance in tests and real world situations, where different problems appear randomly.

#### 3 Ways To Use Mixed Practice

##### 1) Practice Skills Together

For example, in tennis don't practice your groundstrokes, net game and serve separately – use elements of the skills in all sessions and play points where you have to use them at unexpected times.

##### 2) Override the Textbook

Instead of following the linear structure of a textbook add different types of questions from other chapters into your sessions. So for maths, throw in calculus and algebra problems while studying geometry.

##### 3) Fight Your Intuition

Mixed practice will feel ineffective but trust the method and you'll see the results in the long run.

**ACTION – Write down how you can use mixed practice in learning your skill**

# 1 STRATEGY FROM HEBB'S LAW

## 4) ELABORATION

Elaboration is creating mental hooks by linking new information to memorable ideas and experiences – the more emotional, bizarre and funny the better!

Our intuition tells us to get through material quickly using rereading, note taking and highlighting. But because elaboration takes more time, people often shy away from it.

### **So why is Elaboration so effective?**

Hebb's Law (which says that neurons that fire together wire together) means that by linking new information to existing knowledge we're wiring up multiple neurons, which improves our ability to remember.

## 3 Ways To Use Elaboration

### **1) Use analogies**

For example, compare the nucleus and electrons in an atom to the sun and planets in the solar system.

### **2) Explain a new concept to someone in your own words**

Explaining an idea to someone makes it more personal and strengthens your relationship with it

### **3) Relate what you learn to your life**

When an idea has practical value to us we're far more likely to retain it – so think about how you can apply what you're learning everyday.

**ACTION – Write down how you can use elaboration in learning your skill**

## 2 STRATEGIES FROM METACOGNITION

### 5) REFLECTION

Reflection is thinking about our learning in terms of what went well and what we could do better. Our intuition tells us to skip reflection because we believe all of our time should be spent on learning but forget the importance of stopping and thinking about what we're doing.

#### **Why is reflection so effective?**

Because it's a form of repetition focused on continuous improvement. So not only do we benefit from the resulting changes we make, we also deepen learning by reviewing existing knowledge.

### 3 Ways To Use Reflection

#### **1) Keep a learning journal and write down new insights**

I personally prefer to use pen and paper but you could use a digital tool like One Note or Evernote.

#### **2) Build in time to reflect**

Think about what went well, what you learned and what you could do better. A great way of doing it is to reflect through conversation with someone close to you.

#### **3) Visualise your performance**

If it's a presentation at work visualise the process not the outcome – imagine how you'll project your voice rather than thinking about everyone applauding at the end.

**ACTION – Write down how you can use reflection in learning your skill**

## 6) CALIBRATION

Calibration is accurately assessing our performance against a clear standard. Cognitive biases mean we often think we're better than we actually are, so we don't put in the work needed to improve.

So Why is Calibration So Effective?

Because it gives us an accurate picture of our own level so we can identify the areas we need to work on. This increased self-awareness means we'll change things up when something's not working. Here are 3 ways you can use calibration

### 3 Ways To Use Calibration

- 1) Find a Mentor Having a mentor who can give feedback can help you calibrate better and get through sticking points.
- 2) Test Yourself Regularly Use quizzes for knowledge-based studies and practice in context for hard skills. Treat practice as the real thing so that you can realistically assess your level and improve
- 3) Learn from Your Peers Join a community and assess your competence through interactions with your peers – at a Spanish language exchange you could see how well you're able to hold a conversation with the same native speaker every week.

**ACTION – Write down how you can use calibration in learning your skill**

## SECTION 2: INPUT

### EXERCISE 1) TAKE YOUR FIRST STEP

As the old Chinese proverb goes "every journey of a thousand miles begins with a single step" and taking action is key to build momentum.

**ACTION:** Take one action **NOW** that moves you a step closer towards your learning goal and write it down.

#### Bonus Tip

If you're struggling for ideas your action could be:

- Blocking out a few hours per week in your calendar for learning
- Picking up a new notepad on your way home from work
- Telling a friend about your learning project

#### My Action

*For my language-learning project, this first action was organising a conversation with a Spanish speaker.*

## EXERCISE 2) RESEARCH YOUR SKILL

Here are 6 principles of good research, outlined by Leslie Stebbins in "Finding Reliable Information Online" you can apply to your skill

### RESEARCH CHECKLIST

#### 1) Go To the Source

Hunt for the source first and then the information itself. Going to the source might involve a decision as simple as starting your search with Google Scholar instead of Google or some tweaks in your search terms.

#### 2) Be Aware of Your Biases

Be aware of the psychological baggage you bring to the table because we often ask biased questions that take us in one direction. For example if you have a lot on and want to learn a language quickly you might search for something like "learn Spanish in a month" but this will bring low grade options.

#### 3) Choose Between Experts, Amateurs and Crowds

Decide whether you need to use an expert, amateur or crowd. For certain things like choosing a pair of tennis shoes – a crowd-sourced result from reviews might be OK. But for a strategy to learn to play tennis, you're probably better off going with an expert.

#### 4) Assess Context, Motivation & Bias

Always ask questions – like what incentives does this person have to put this information out there? What's their previous experience and how might that affect their opinion? What experiences have they had that bias their view?

#### 5) Compare & Contrast

One is a dangerous number when it comes to learning and you should always do whatever you can to check multiple sources when looking for an answer to your question. Always do what you can to find multiple sources.

#### 6) Know When to Go Deep

Searching for information is an iterative process, based on continual choices – where to look, how many sources to read, what type of sources to go after and how long to spend on each one. Learn to recognise when a quick Google search is enough and when you're about to dive down a very deep rabbit hole.

**ACTION – Write down what you've learned about your skill from your initial research**

## EXERCISE 3) SELECT YOUR MATERIALS

Find a few resources you like the look of, that suit your preferences, and then dedicate a fixed amount of time each day to using them.

### MATERIAL SELECTION CHECKLIST

#### 1A) Get Recommendations from a Trusted Source

Following the principle of going to the source, it's worth trying to find several experts and teachers who have a deep knowledge of your field or skill and seeing what they recommend as resources for a beginner to get started with.

AND/OR

#### 1B) Google Best Resources on X

I understand that if you're looking to get started quick, searching high and low for expert recommendations may slow you down. A quicker way would be to Google "Best books on X" which will bring up a bunch of blog posts and articles written by authorities on that topic.

#### 2) Read Reviews

Go to review networks like GoodReads for books to read thousands of reviews about the materials you're searching for. If you want to scan reviews on Amazon then make sure you use Fakespot to analyse false reviews.

#### 3) Research The Author/Creator

Once you've narrowed down your search, spend a minute or two checking out the author or creator – do they have the necessary experience or qualifications to be an authority on their subject? Have they written other books or won any awards for their work?

#### 4) Look At the Creation Year

If you're looking to pick up a skill that requires current information, like coding, you should only buy or borrow materials written in the past 5 years. But remember Lindy's Law - if you're looking to learn something like stock market investing or chess make sure that you check out some of the classics.

#### 5) Buy / Borrow Your Materials

When you've finished your research and picked out 2 or 3 materials to get started with, buy them! If you're still not sure where to start you can always pick up a beginner's handbook like the Complete Idiot's Guide To or Dummies Series, which will walk you through the basics of any skill.

**ACTION – Write down the materials have you selected for your skill of choice**

## EXERCISE 4) DECONSTRUCT YOUR SKILL

At the early stages of learning a skill, it's hard to know where to start. That's why it can help to break your skill down into individual sub skills that can be practiced in isolation before you put them together.

Once you've deconstructed the skill you can identify the most important sub-skills, which will give you the most bang for the buck and start with those.

For example playing golf can be deconstructed into:

- Choosing the right club
- Driving off the tee
- Hitting shots out of the rough
- Hitting shot out of the bunker
- Chipping
- Putting

### DECONSTRUCTION CHECKLIST

Here are 3 ways you could get inspiration for deconstructing your skill:

#### 1) Talk To Experts / Teachers

One of the best ways to deconstruct a skill is to find people whose job it is to break the process of acquiring the skill into manageable parts This person should have done what you want to do and taught others to do it as well.

#### 2) Search for Systems on Google Images / Pinterest

Very often experts will deconstruct skills into systems or frameworks, which come in image form. The best way to find these is to search for "system, framework, mindmap, diagram" plus the skill on Google Image / Pinterest.

#### 3) Look at Neighbouring Skills

If you're trying to learn a less popular skill and can't find a framework then it can help to find a system for a similar skill. So if you want to learn kickboxing but can't find a system you could look for a deconstruction of boxing,

**ACTION – Write down a deconstruction of your skill by writing down the key sub skills that you are going to practice**

## EXERCISE 5) SEQUENCE YOUR SKILL

### Sequencing

Once you've deconstructed your skill you should put together a process for practicing your subskills in order.

### SEQUENCING CHECKLIST

#### 1) Begin With the End in Mind

Always keep your end goal in mind when sequencing your skill. If my goal is to have a 60 minute conversation in Spanish with a native speaker, I need to sequence my learning in a way that prioritises as much speaking and pronunciation as possible in the early stages.

#### 2) Separate Explicit from Implicit

When you deconstruct a skill or talk to experts, you may find that there are things you pick up on that are hard to put into words. Try to identify the hidden sub skills that may allow you to skip a lot of the intermediate stages.

#### 3) Identify What You Can Get Good at Fast

Reflect on your existing knowledge and skills and see whether there are certain subskills in the sequence that you could pick up very quickly, because of overlap. If there are, focus on them!

### ACTION – Write down your deconstructed skill in sequence

## EXERCISE 6) GATHER YOUR RESOURCES

If you're serious about learning something, you will need to invest in the right resources and tools. The key is pick these up quickly so that accessing them doesn't become a barrier to your practice.

### RESOURCE FINDING CHECKLIST

#### 1) Go Hunting On Reddit

Type your skill into the search bar and you'll find multiple threads recommending the best equipment and resources from people who have learned your skill. Make sure you check multiple threads to find patterns.

#### 2) Source Equipment

For cheaper second hand resources go to eBay or GumTree or check out car boot sale app Shpock. As always, don't let common sense be clouded by what looks like an unbelievable bargain. Shop around and ask questions!

#### 3) Analyse Reviews

Use Fakespot to analyse false reviews – add the plugin to your browser and it analyses all of the reviews and works out whether they're suspiciously positive or not, as well as who actually bought the product.

**ACTION – Write down the resources you've bought below**

## SECTION 2 SUMMARY

By the end of this section you should have done 3 things:

- 1) Learned the principles of good research and applied that to your skill.
- 2) Understood how to use the resources and materials you've gathered – in particular the best ways to consume text, audio and video.
- 3) Deconstructed your skill into manageable parts and organised those parts into a sequenced plan.

# SECTION 3: PROCESS

## 1) NOTE TAKING CHECKLIST

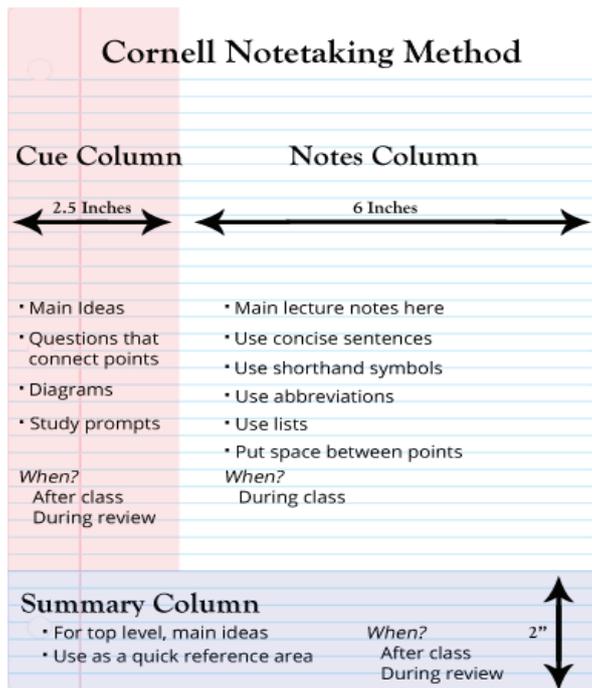
Here's my 5 step method that will help you take awesome notes.

### Step 1) Blend Digital & Physical Devices

Use a FeedReader like Feedly to pull information from different sites into categories, a digital storage tool like Evernote to store the links to all of your favourite resources and a physical notebook, to take down your main notes.

### Step 2) Use The Cornell Method

One of the best ways to take notes in a physical notebook is the Cornell Method, which allows you to divide the page into three main sections –



1) The largest section is the upper right hand side of the page where you can write down ideas and important information as you're being taught.

2) The second section will be a column on the left side of the page where you'll write down keywords, main ideas, essential questions and prompts to remember the information.

3) The third and final section will be a few rows at the bottom of the page where you'll have to summarise the main lessons on this page in your own words.

### Step 3) Use A Mind Map

Once you've taken your initial notes using the Cornell method it can help to go a level higher and see how all the ideas are interrelated using a visual diagram like a mind map. Mind maps are visual diagrams that illustrate a subject and its related ideas.

### Step 4) Compress Your Notes Into a One Pager

When you've covered a particular concept in depth, take some

time to compress it into a simple one-pager. This will force you to focus on the critical components of a skill and give you an actionable resource that will allow you to repeat the process and teach others in the future.

### Step 5) Review Regularly

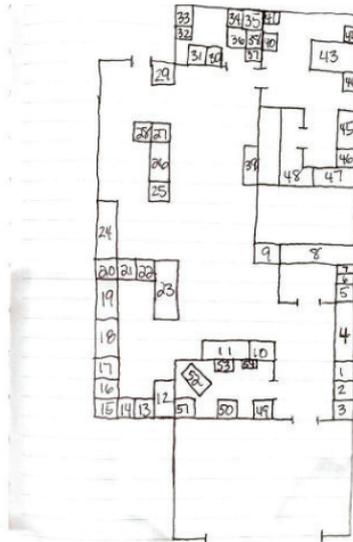
The whole point of taking notes is to review them and studying something once is never enough. At the end of each week or once a month, review what you've learned in the last period and reflect on what you need to focus on.

**ACTION – Write down how you'll apply these notetaking techniques to your project below**

## 2) MNEMONIC TECHNIQUES CHECKLIST

Here are some of the key techniques for boosting your memory:

- |                           |                      |
|---------------------------|----------------------|
| 1 - Clothes washer        | 28 - Chair           |
| 2 - Clothes dryer         | 29 - Cabinet         |
| 3 - Water softener        | 30 - Rolling cart    |
| 4 - Storage closet        | 31 - Book shelf      |
| 5 - Sink                  | 32 - Scratching post |
| 6 - Toilet                | 33 - Litter box      |
| 7 - Scale                 | 34 - Table           |
| 8 - Tub/shower            | 35 - Chair           |
| 9 - Table/chairs          | 36 - Coffee table    |
| 10 - Coat rack            | 37 - Chair           |
| 11 - Bar                  | 38 - Lamp            |
| 12 - Kitchen table/chairs | 39 - Fire place      |
| 13 - Cat feeder           | 40 - TV              |
| 14 - Garage               | 41 - Cat bed         |
| 15 - Fry Stove            | 42 - Glass table     |
| 16 - fridge/freezer       | 43 - Bed             |
| 17 - Microwave            | 44 - Bench           |
| 18 - Cabinets             | 45 - Vanity sink     |
| 19 - Stove                | 46 - Toilet          |
| 20 - window               | 47 - Shower          |
| 21 - Coffee makers        | 48 - Closet          |
| 22 - Dishwasher           | 49 - Closet          |
| 23 - Sink                 | 50 - Toy boxes       |
| 24 - TV                   | 51 - Toy baskets     |
| 25 - Large table          | 52 - Bed             |
| 26 - Couch                | 53 - Night stand     |
| 27 - small table          | 54 - Cork board      |



### 1) Memory Palaces

Using a memory palace involves visualising a space in detail and associating the features of that space with mental images of physical objects, ideas or people you want to remember. To recall these all you have to do is imagine walking through the space, encountering the items as you go along and linking them together using a story – the funnier and more bizarre the better.

### 2) Other Mnemonic Techniques – PegWords, Verbal and Musical

#### A) Pegwords

The pegword system uses phonetic mnemonics, which interact with the mental images that we want to remember, instead of the different parts of a building in memory palaces. So 1 is bun, 2 is shoe, 3 is tree and so on.

This method is particularly useful when you need to remember things in specific sequence like a shopping list or series of road names forming a particular route. Imagine the first two items on your shopping list are a birthday card and orange juice. First you could imagine a bun sitting on top of a birthday card, followed by a carton of orange juice being poured into a shoe. Generally speaking the more bizarre the image, the better this tends to work.

#### B) Verbal Mnemonics

Verbal mnemonics are regularly used in two main forms.

First, there are reduction based mnemonics that reduce the amount of information – for example the nonsense word SOHCAHTOA is often used to remember the rules of trigonometry.

Next, there are elaboration based mnemonics, which enhance the same information – Richard Of York Gave Battle In Vain helps us remember the colours of the spectrum by matching the first letter of each word (Red, Orange, Yellow, Green, Blue, Indigo, Violet)

#### C) Musical Mnemonics

Musical mnemonics can also be highly effective. A song that you know well can provide a mnemonic structure, linking the lyrics in each musical phrase to an image that will cue retrieval of the desired memory.

**ACTION – Write down how you'll apply these memory techniques to your project below**

### 3) MENTAL CLARITY CHECKLIST

To learn, your mind needs to be clear. Having a lot of pending tasks isn't what troubles us—it's the anxiety caused by having a lot of things undefined in our heads and no action plan to complete them. Planning next actions gives us the peace of mind to focus on the most important thing right now.

#### 1) Capture Everything

Get a blank sheet of paper and write down everything that comes in to your head. I mean everything—including the groceries you need to pick up and the phone call you need to make to a friend.

#### 2) Define and Eliminate

Once you've captured the uncompleted tasks in your life identify which ones actually need to be done. A large amount may no longer be relevant and can probably be dismissed and removed from your list for good.

#### 3) Define a Next Action and Do It

If a task takes less than 2 minutes, then do it now. If it takes longer specify the next action and put it in your calendar or delegate it to someone else if you have the luxury of doing that

**ACTION – Complete this mental clearing exercise in the space below**

#### 4) FOCUSED & DIFFUSE CHECKLIST

To learn effectively, you'll need to move between the focused and diffuse modes of thinking. Here's a three-step process to move between these two modes of concentration and relaxation effectively to learn better.

##### 1) Start Early

If you're trying to solve a new problem, or writing an essay or article, start the process as soon as possible. When writing a blog post, I like to write a first draft well before I intend to publish it, so that my mind can unconsciously work away on the post in the diffuse mode.

##### 2) Experiment with the Pomodoro

The Pomodoro technique is a productivity tool that involves spending 25 minutes on focused work followed by a 5-minute break. I've found that 25-minute cycles are a little too short for me for some types of work, like writing, so play with the lengths of the cycles to see what works for you.

##### 3) Don't Let Breaks become Distractions

Taking breaks is important to access the diffuse mode but don't let them turn into distractions – a 5 minute break can easily turn into an hour of browsing your Facebook newsfeed. When returning to focused work from a break, consider blocking your access to the Internet using software like Freedom.

**ACTION – Write down how you'll use the focused and diffuse mode to learning your skill below**

## 5) ORGANISATION CHECKLIST

A simple but effective organization system is crucial for effective learning – because if you know where everything is, you can find it when you need it, without spending unnecessary time looking for it, or never finding it. Here's how to build an effective organization system across devices:

### 1) Make Your System Usable Across Platforms

Numbering your files creates a permanent level of hierarchy that allows you to find anything as and when you need it.

The most important thing is that you replicate this numbering structure in every single subcategory of physical and digital storage. So let's imagine you gathered information in 5 main categories – 1) Work/Career, 2) Personal, 3) Relationships, 4) Health and 5) Learning Projects

Every subfolder within those folders should then be numbered – and you can use 3 or 4 digit systems depending on how many folders you actually have.

A 3 digit system would be 001,002,003 etc.

A 4 digit system would be 0001, 0002, 0003 etc.

### 2) Minimize Levels of Hierarchy

A level of hierarchy is just the number of subcategories you have in your system.

You don't really want to deal with more than 3 or 4 because with more than that it can be very difficult to remember where everything is. So when in doubt create more folders so you can store and find everything quickly and easily.

For instance for each learning project, you have past or present, you should have separate subfolders for audio, video, articles and so on.

### 3) Information Collection and Batch Updating

Once you've set up a simple filing system across your physical and digital worlds, then you need to have a strategy to deal with incoming information.

Set up capturing systems or buckets in both the physical world and digital world that you can sort through on a weekly or bi-weekly basis.

For example, in the physical world you can have a letter-tray on your desk, where mail or other paper can be stored. In the digital world you can have a current week or month folder, which acts as a digital document tray. Then at the end of the week or month, you can go through it and file it all in a batch.

**ACTION – Write down how you'll apply these organisation techniques to your project below**

## SECTION 3 SUMMARY

By the end of this section you should have done 3 things:

- 1) Learned the most effective note taking strategies and started applying them to your skill of choice
- 2) Understood the core principles of memory and the strategies that build on them to help you memorise information effectively
- 3) Understood the best ways to manage you time, energy as well as the best ways to organise your information

## SECTION 4: OUTPUT

There are 3 types of learning project that can serve as the output for the process of learning your skill – building a knowledge base, creating an action blueprint or building a skill through deliberate practice.

### EXERCISE 1) SELECT YOUR LEARNING PROJECT

#### 1) Knowledge Base

A knowledge base is created in order to maintain and grow a level of knowledge in a specific field. For example, my knowledge-based skill of studying macroeconomics would fall into this category. Any student who is currently at school or university would most likely be using this type of project.

#### 2) Action Blueprint

Action plans are checklists that allow you to complete a certain one-off task, by breaking it down into steps. Here the goal is not to memorise the process, because it's likely to be a one off. A good example of a project that might require an action blueprint is to build a website or start a blog or podcast.

#### 3) Deliberate Practice

Deliberate practice is a goal directed and intentional form of practice that consists of repeated striving to reach beyond current performance levels. This learning project is appropriate for skills that you'll be using repeatedly, like playing tennis or learning a musical instrument.

**ACTION – Write down the type of project you'll be using for your skill of choice in detail**

## OPTIONAL EXERCISE 2A) START A TEACHING PROJECT

\*\*\*RECOMMENDED FOR KNOWLEDGE BASED SKILLS\*\*\*

As someone who has taught hundreds of students in the last 3 years I can safely say that teaching is the best way to learn a knowledge based skill.

Here are a few suggestions for starting a teaching project:

### 1) Start a Blog

Start a blog or newsletter and set a target of writing one article per week. The goal is not to amass a huge audience overnight – it's to give yourself the space to write about your experiences and impose external accountability.

### 2) Start a Podcast

Podcasting is an excellent way of consolidating your learning in an easily digestible format and sharing it with the world. The added bonus of podcasting is the opportunity you have to meet and engage with other experts.

### 3) Do Talks at MeetUps and Conferences

One of the best ways to share your knowledge with others is to do speaking engagements at MeetUps and Conferences. This forces you to organise material in a way that can be easily understood by a lay audience.

**ACTION – Write down the type of teaching project you'll be using for your knowledge-based skill**

## OPTIONAL EXERCISE 2B) DELIBERATE PRACTICE CHECKLIST

\*\*\*RECOMMENDED FOR MOTOR BASED SKILLS\*\*\*

Deliberate practice is more than just doing something repeatedly – it's goal directed and consists of striving to reach beyond current performance levels.

Here's the checklist for learning a skill through deliberate practice:

### 1) Eliminate Barriers To Deliberate Practice

Things that can get in the way of deliberate practice include:

- Misplacing or looking for your tools and equipment
- Using equipment that's borrowed or has limited usage hours
- Environmental distractions like TV, phones and computers

Manage your environment properly and remove these barriers so that when you're practicing you're practising – no ifs and no buts.

### 2) Make Time For Practice

At the early stages it's very important to block out dedicated amounts of time and put them in your calendar. If it's not in your calendar it will not get done. Schedule practice for a period of time and stick to it, no matter what.

### 3) Prioritise for Fast Feedback Loops

The best sources of feedback are coaches and mentors but you can also use capture devices like phones to record yourself. The key is to get as much accurate feedback as often and as quickly as possible.

### 4) Emphasise Quantity and Speed

In the early stages of learning any skill, quantity and speed beat quality every time. That's not to say that form and technique don't matter, but the most important thing is to get those hours in fast!

### 5) Reflect and Review

Take the time out to reflect on your learning experiences by making some notes, sitting in silence or going for a walk. The only requirement is that you focus consciously on your recent experiences for whatever you're learning.

**ACTION – Write down your deliberate practice plan for your skill**

## EXERCISE 3) BUILD YOUR LEARNING STATION

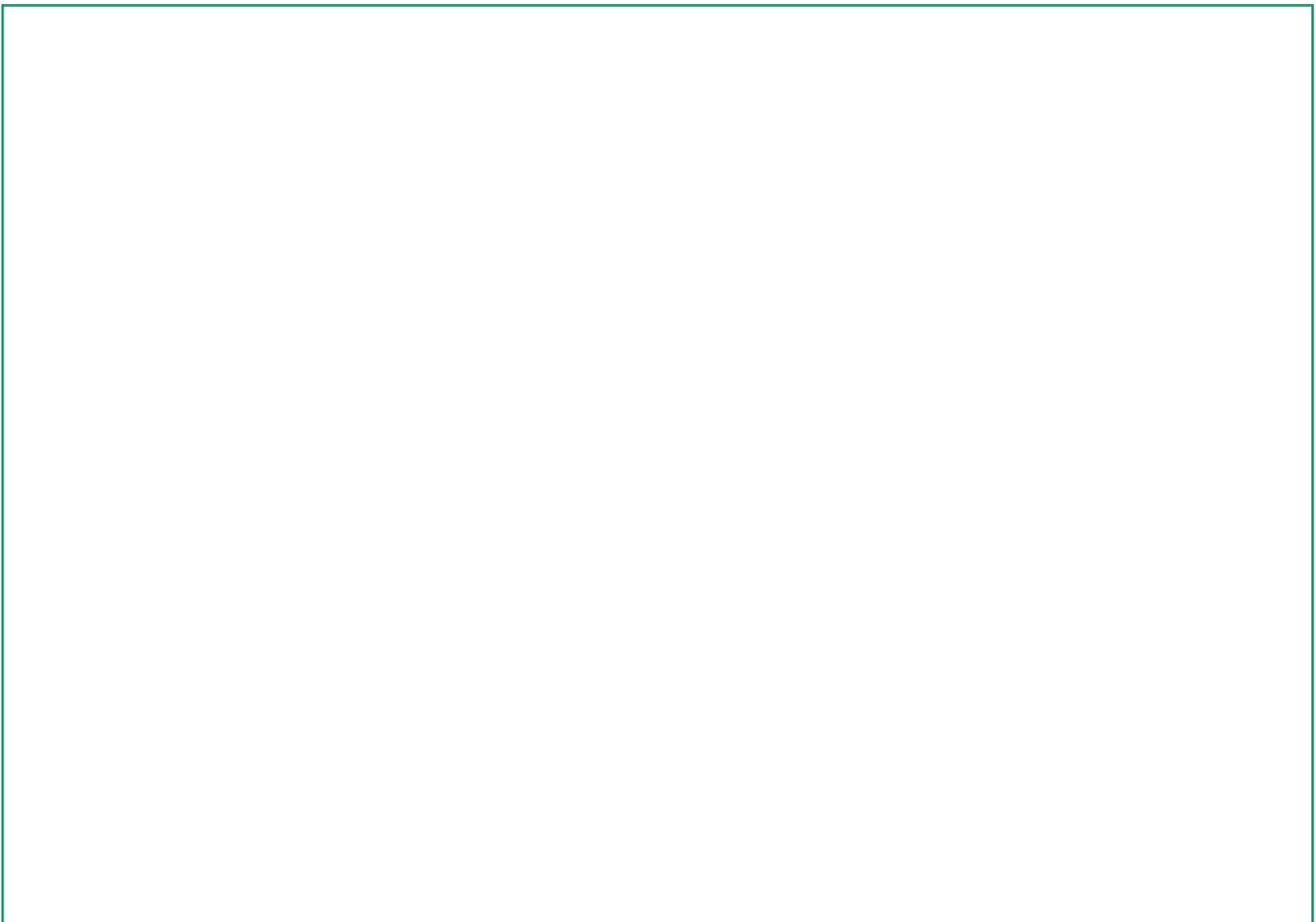
Take a moment to consider what your ideal learning space would look like, and answer these questions:

Where would you like your space to be – in your home, a co-working space, a space at your company's office?

- What kind of furniture would you want? (what kind of chair, would you want a sitting or standing desks and what about book cases and filing cabinets)
- What kind of equipment would you want? (a laptop or desktop, do you need a printer and scanner, or any other specialised gear)
- What kind of décor would you want in the room to really make it your own, like the colour scheme, decorations or art?

Once you've considered all of these factors, then make this idea a reality.

**ACTION - Choose a space and try to incorporate as many of the ideal conditions given the constraints you face – space, budget and time**



## SECTION 4 SUMMARY

By the end of this section you should have done 3 things

- 1) Understood the three kinds of learning project – building a knowledge base, developing an action blueprint and building a skill through deliberate practice and applied the correct one to your skill
- 2) Created a structured plan to execute your project of choice and understood the importance of building learning habits
- 3) Understood the importance of managing the emotional side of learning – how to overcome excuses, deal with failure and make learning fun

# SECTION 5: MAINTENANCE

## EXERCISE 1) FIND YOUR COMMUNITIES

Real world communities are a very important part of the learning process because of the human interactions you'll have with people.

### FINDING COMMUNITIES CHECKLIST

#### 1) Search on EventBrite and Meetup

Search for groups that cater to your skill and filter according to the distance you want to travel and the days you're available.

#### 2) Experiment Until You Find What You Want

You're probably not going to love the first community you visit, and even if you do, you want something to compare it with so make sure you visit a few.

#### 3) Stick With It

Once you've found something that's good enough, stick with it and make it a regular part of your weekly schedule.

**ACTION – Write down the communities you've found in real life and the ones you've found online**

## EXERCISE 2) FIND YOUR TEACHERS

There are many different places you can find experts both in the real world and online. I definitely recommend that you look for teachers and mentors in real life, but there's nothing stopping you from finding them online too!

### WHERE TO FIND TEACHERS CHECKLIST

#### 1) Events on EventBrite and Meetup

Search for groups that cater to your skill and filter according to the distance you want to travel and the days you're available. Then actively seek out the experts in those groups that can help you with your skill of choice.

#### 2) Authors & Creators Online

Search for people who are authorities on their subject – they may be publishing their ideas in books or on blogs. They may also be regular interview guests on podcasts in your field of choice.

#### 3) Coaching/Expert Websites

There are also loads of coaching and expert websites where you can hire people directly and pay them for their services and advice.

##### A) Coach.me

Coach.me allows you to get low cost online coaching, which is not as effective as an online video call but can be a great option if you're on a limited budget

##### B) Clarity.fm

Clarity connects you to top industry experts who can give you specialised advice for your skill of choice.

##### C) Pop Expert

Pop Expert connects you to thousands of coaches and skill specific specialists who you can book for a coaching session.

**ACTION – Write down the places you'll seek mentors in real life and the ones you've found online**

## EXERCISE 3) FILTER YOUR TEACHERS

### FILTERING TEACHERS CHECKLIST

**1) Make Sure They've Done What You Want To Do**

What's the point in seeking someone's advice who hasn't actually learned the skill you're trying to acquire? Make sure your expert has done what you want.

**2) Make Sure They've Taught People To Do What You Want to Do**

It's not enough for someone to have achieved what you want, because they may not be able to teach you effectively. You want to work with someone who regularly teaches people to do what you want.

**3) Make Sure That You Find Someone Who Will Push You**

The nice coaches are rarely the best ones – make sure you find someone who pushes you and calls you out when you're not putting in the hours.

**ACTION – Once you've found a few teachers you like – ask if they satisfy these conditions.**

### SECTION 5 SUMMARY

By the end of this section you should have done 3 things

- 1) Understood the importance of community and learned the best ways to find and join ones that are relevant to your skill
- 2) Learned how to find mentors and coaches that can help you make progress on your learning journey
- 3) Understood the fundamental importance of developing your mind set throughout the learning process