

How I learned to succeed

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Careers talk for 6th years at OLM Drimnagh

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Intro

My name is Sam O'Brien, and I work as a Senior software engineering contractor.

That means that I write code well enough that I am self-employed and work on contract for my clients. Pay is generally higher if you work this way but there is also higher expectations. You have to be very dedicated and good at your job.

Before I worked in software development, I was training to be an Architect. I switched career due to difficulties in that industry, finding work and my own struggles with it as a career path.

I've lived and worked in Ireland, the US and Australia, one year ago I was working 100% remotely. I really enjoy my current job, and the lifestyle it allows.

My story - school & home life

Our circumstances don't define our future, but they can have a big impact on it.

I come from a low income broken home, my father moved away when I was 10 although he remained a part of my life, we also didn't have a lot of money.

I didn't go to a great school, and my family didn't have a very academic history although my mother & father did encourage me to go to college.

I went to college on a couple of grants, the government grant and the access programme.

Both were extremely helpful, but I wasn't prepared to deal with the challenges of college yet, academically, emotionally or even logistically.

My story - college degree & career 1

I didn't have much advice about what to choose and picked a course that I didn't really enjoy, engineering, and had to switch courses so I missed one year. We didn't have the internet at home, I only got access in college.

I started an architecture degree with very little info about that industry, and this time I struggled through and passed although not with great grades.

I worked for a few years in architecture during the housing crisis after 2007 and struggled to find enough work at times. My career felt pretty hopeless so I moved to the US on a graduate visa to try to build up my portfolio with volunteer work.

I met some incredible mentors there and here also when I returned, and their inspiration and advice changed my life completely.

My story - college degree 2

I now had years of learning that trying hard and working hard wasn't enough, I had to make the right decisions.

I had mentors who were very successful people, who believed in and encouraged me, and I realised success was something I could achieve.

I had years of experience in self organisation, learning, trying, failing, and trying again. I also had great advice this time around.

I went back to college and chose a computer science degree, I got almost all A's and worked extremely hard at it. I also enjoyed that course a lot more as when we are doing well, we can relax & socialise well too.

My story - career 2

I graduated with a 1.1 and started to look for work, which I found after ~3 months and became a software developer.

I knew the value of targeted hard work now, not just hard work, and this was a good target so I dedicated myself to my new job.

I built on top of my experience in the past where I could in terms of motivation & organisation. I sought out advice & mentors, did long hours, and advanced quickly.

I worked as a developer, then team lead at two successful companies, including remote work in Australia.

I then became a contractor, and continue to enjoy my career.

Lessons I learned

I didn't have good preparation for college & career the first time around, but I dedicated myself to learning how to improve that situation.

College & career round two have gone so well that I wanted to share what I learned with others who might also face those challenges.

It's good to learn from your mistakes but it's better to learn from others mistakes.

I believe that *success = motivation, knowledge and technique.*

Or *why to try, what to do and how to do it.*

There are lots of ways to describe making effective effort towards a goal.

Why to try - natural talent vs effective effort

Staying motivated is challenging, but necessary. When we are motivated it is easier to do the things we need to do, and to put in the time & effort needed.

People will often attribute success to natural ability, intelligence, luck, or other circumstances beyond their control. This is less important than you may think.

The reality is that *effective effort* is far more important than talent or luck, and is something within our control. Once we realise this, and learn how to make *effective effort* it becomes easier to make that effort.

Once we start to see success from our efforts, it becomes easier still.

You can learn how to learn, how to be motivated, how to succeed.

Why to try - procrastination

Procrastination is when you should be doing something productive, but do something else instead, it is often an emotional response to pressure.

You will always find excuses not to do something, but excuses have no value to you and will make you feel worse in the long run.

The hardest hurdle to overcome is getting started. The best time to do something may have been in the past, but the second best time is *always* now.

Start the task in some small way, and it is much easier to continue later (or now).

This is one of several ways to beat procrastination.

Why to try - procrastination tips 1

Starting a task will help us continue it.

Thinking about *concrete actions* helps us do any task. A wishy washy idea of “I should study” isn’t much help, but “I should get my books, put them in my bag & go to the library” is much better. You can grab your books right now, and other actions will follow. Work backwards from the completion of the task, and identify the first real thing you would need to do, that’s the *concrete action* to take.

Another valuable, easy way to start a task is to outline it in a *rough plan*. Skim the requirements of the task, describe the steps on a piece of paper, list the points that will result in it being completed. This helps a lot and you may want to continue the task right now, at least you have a plan and greater understanding of the task.

Why to try - procrastination tips 2

Skimming is where you go over a larger task quickly without detail. Studies on learning have shown skimming is a good thing, it provides *context* and an idea of a task's *size*. Read the contents of a book first, skip through the chapters quickly, read the requirements of a course, read a synopsis online. It isn't lazy, it's really useful, and another *concrete action* you can take to start a task with a *rough plan*.

It can help to be in a *productive environment*. When I was studying, I would sometimes study at home, but I would also sometimes go to the library, or a cafe. The change of scenery renewed my interest in general, and once I was there there was less to do except study. I might read some articles, watch videos on youtube, but I would inevitably do at least some valuable work the longer I was there.

Why to try - procrastination tips 3

If you are working hard, you need a *reward*. It's easier to commit to answering a question, or reading a chapter, or doing the next increment of work if you know you will get some guilt free reward afterwards. Procrastinating instead of studying makes us feel guilty, but if we do some work and decide that afterwards we can have some reward, we will be motivated to do so, and enjoy it all the more.

Sometimes we don't study as hard as we should have, this leads to guilty feelings. Procrastination is an emotional response to avoid work, so if we *forgive ourselves* for not being perfect, we can start fresh now. Remember, the second best time to do a task is now. Use one of the techniques to get started, *concrete actions*, *planning*, *promise of a reward*, and *forgive yourself* and get on with your work.

Why to try - procrastination tips 4

We may also procrastinate because of a *fear of failure*. The path to success is paved with failures, and we shouldn't be afraid of that. If you fail, learn what you can from the failure, the reasons around it, and what you can change. Try again and again *if it makes sense to do so*, and when you succeed make it stick. It is also better to develop a self image of being determined than perfect. I know plenty of people who are terrified to try and fail for this reason, don't be like that.

Remember it is worth it. You will succeed if you learn from failure and make effective efforts towards your goals. You may need to change approach many times, but once you find a pattern or process that works, you can make the most of that. I regret the failures I had in the past, but I made sure I learned from them and the rewards now are well worth it. I'm glad to be able to share these lessons.

What to do - figuring things out

Being determined is all well and good, but we are talking about *effective effort*.

Spinning your wheels doesn't get you anywhere.

I tried hard for years without much success in my first career. Once I learned what I *should* be doing I was able to make effective effort towards my goals and start to rack up successes, starting with A's at my second college course and culminating in my current job.

Learning what to do was a result of talking to people, researching, being humble and willing to listen to the advice of others, and acknowledging that I am one person with one person's perspective and experience.

What to do - speaking to people

Speaking to people is incredibly helpful. When I decided to change career, I spoke with my mentors in the US and my uncles back in Ireland, I asked for advice and they gave it. I visited UCD and arranged to speak with the heads of the different faculties, I asked them what I should do and they had their finger on the pulse of many industries. I still ask people around me about their plans, their take on industries and career paths, and learn whenever I can.

People often want to help you if you ask them, and they can become *mentors*. My family friends in the US are very successful people and they supported and motivated me, they convinced me that success was real and within my grasp. My uncles in Ireland have a similar role, I speak with them even now about my career. I was lucky to work with some very smart people who I also tried to learn from.

What to do - research

Speaking to people will give you a real world broad overview and advice, but you must *research* a career or topic yourself too. I didn't have the internet at home when I was in school or I may have gone straight in to computer science had I learned about it.

Learning how to research at college is important too, learn how to use the library and get in there early. Apply some of the techniques I will describe next to learn effectively.

Remember you are one person, with one person's knowledge and perspective, if you learn from others you benefit from the aggregated knowledge of many people.

How to succeed - techniques

Now that you are motivated, can beat procrastination, and know how to figure out what you should do, you want to be able to make *effective effort* towards your goals.

One of the best things I did in recent years is the Coursera course “*Learning how to Learn*”.

It’s a short course online in how your brain works, how you learn and how best to learn. A lot of my talk is based on lessons I learned from that course.

If you take one thing away from my talk, it should be to *at least* look at that course or some abridged notes on it, there are lots available online. Better yet, take the course, it’s quite short and will show you that you can be academically successful.

How to succeed - planning & notes

Skimming & planning out a larger task allows you to get an idea of the size of the task, what you'll be doing, and allow you context for your learning as you go.

Your plans and notes should start out rough and vague, and then you can make them more detailed later. Get your ideas down first, you can perfect them later.

Physically writing things down is proven to help us learn. It forces us to go through something word by word, and activates more of our brains according to several studies.

Develop a note taking style, I like to have a list of keywords and topics first without structure, and then I break it down into a hierarchy.

How to succeed - notes example

0 describe my notes, examples, put in slides, hierarchy

1 Describe my notes

- have an example
 - include the unordered list I put in 0
- put in the slides
 - format like the notes I take
 - hierarchy
 - simple

2 Talk about the notes benefits

- Simple format
 - quick to take
 - doesn't break concentration
 - easy to change
 - easy to copy & paste, share etc.
- easy to change this style to suit others
- easy to iterate on
- breaks tasks down into smaller units

How to succeed - process & Kaizen

The kaizen principle is a Japanese concept that involves creating a process to approach a problem, using that process, and improving it as you go.

I have processes for taking notes, approaching tasks & problems, learning etc. and I can develop those processes as I go. This talk lists a lot of my processes.

Having a process in place means needing to make fewer decisions and allows us to improve our approach over time. It also allows us to develop useful habits as you may do the same productive thing repeatedly.

How to succeed - breaking down problems

As you develop processes, you should also break problems down into smaller tasks.

My note taking style naturally allows you to break tasks down into subtasks, which can become concrete actions. This is also a form of planning as you can see clearly what you need to do.

How to succeed - learning

You should interleave topics you are studying. That means if you are studying X for a long time, and feel you aren't absorbing any more information, you can study Y for a while. The parts of your brain that were learning X may be over tired, but you can learn Y without issue.

You should also deliberately return to topics a day later and a week later etc., even if you feel like you *get* the topic right now. Forcing yourself to recall the topic at a later date reinforces the topic and is much more like how you will recall the topic in an exam.

You should write notes as you learn, it forces you to actually absorb the information. Do some test quizzes or sample exams too.

How to succeed - deferring tasks

You can't do everything immediately, and it is valid to put things off until a later date sometimes if you have more immediate tasks.

If I think of something important, I send myself an e-mail with "todo" as the topic. I have access to my email at every computer and on my phone, and I always read my emails. I find this is the most consistent way for me to do my todo tasks, no other app or technique works as well.

For immediate things at work, I break my notes down into post-it notes and stick them on my desk in front of me. This is another low-tech solution to a high tech job, the point is that the notes are in front of me, and I physically tick them off which is quite satisfying.

How to succeed - rest & exercise

Exercise is proven to help us learn, and to allow us to think more clearly. It gets our blood pumping, and flushes the metabolic byproducts of hard thinking from our brains, similar to sleeping.

Sleeping and rest are also critical, get as much rest as you can for the same reason. We learn far less effectively when we are tired.

This is a topic expanded on much more in “Learning how to Learn” which covers what chemicals in our brain affect learning.

How to succeed - enjoy success

All this effort is for a reason.

Once you start to see successes, even if it takes a while for them to arrive, be sure to enjoy them, and be proud of what you achieved.

Socialize, go out, have fun and enjoy yourself without guilt as you have put in the work and achieved your goal.

Make the most of your successes and the rewards they will bring.

My job

I work as a software engineering contractor. That means I write code and develop software for a company on a contract basis.

In general, software engineers are very much in demand. That means they are paid well, treated well, and can work in most countries around the world. It's a great job if you want to travel and work at the same time.

The work itself is interesting, I get to make creative solutions to problems and see them go into the real world and solve real world problems. You also get to work with some great people.

If you want to start your own company some day, or become a manager, it's also a great skill to have for that, and has lots of entrepreneurship opportunities.

Resources

Learning how to learn course

<https://www.coursera.org/learn/learning-how-to-learn>

Learning how to learn notes

<https://adrian-philipp.com/post/online-course-learning-how-to-learn>

Access college website

<https://accesscollege.ie/>

UCD access places (there are other colleges too, this is just a sample)

http://www.ucd.ie/registry/admissions/access_targets.html

More on UCD access

<https://www.youtube.com/watch?v=CNEh9a2ZZPA&authuser=0>

My website

<https://samjamesobrien.com/>

Writing by hand is helpful

<https://www.forbes.com/sites/nancyolson/2016/09/28/writing-by-hand-helps-student-cognition-in-a-specific-way/#13203600891e>

Kaizen

<https://en.wikipedia.org/wiki/Kaizen>