**[Hana] How did you manage to keep learning on your own after graduation?**

**[Adel] Actually, I encountered a lot of challenges in self-studying, I fell into many traps, but I finally somehow managed to overcome them.**

**[Hana] Likewise. Unfortunately, people don't really think about self-study until they get to a point in their adult life when they decide that they want to learn something again(new).**

**[Adel]** you become overwhelmed about many different things you didn’t have to worry about before like:

1. **(what material should I study)**
2. **(What about the syllabus)**
3. **(Or how do I asses myself)**

**The breath versus depth Learning**

**[Hana]** yeah yeah ,For instance, let me tell you about the most annoying pitfall I faced in self-studying.

**[Adel]** Sure

**[Hana]** Imagine you're interested in learning AI. As you explore, you find out that AI involves skills like coding, math. So, you decide to learn how to code as a first step." You come across many recommendations to start with Python , eventually you find a well-reviewed course and during the learning process you run into a concept such as **object-oriented programming** and it’s okay it’s kind of makes sense to me but I feel like I don't really get it, so in order for me to get it I think I need to take a full introduction of computer science course.

By then, you maybe encounter another concept, such as **memory.** You might think, 'Okay, I have a basic understanding of memory, but I don't fully digest how it works.'", well I better learn how that works too. so, then you put aside that course and you go to another course and so on, and you become extremely overwhelmed with tons of unfinished courses.

**[Adel]** This is called a **depth-first approach** to learning, isn’t it?

**[Hana]** Yeah, I think I heard that before.

**[Adel]** it's about starting with one thing and then falling deep trying to understand everything about this one topic and you end up getting super deep to the point where you forget what your original goal was, and you feel very overwhelmed by all these different things and it’s much easier for you to give up.

**[Hana]** Yeah exactly

**[Adel]** in contrast to this is **the breadth-first approach**, the breath first approach suggests starting with basic knowledge let’s say in AI, you learn some introductory things. and you might end up coming across a topic that you don't understand. that's okay I don't have to fully understand how that works but I grasped the main concepts of it. By then you learned enough to start a project and gradually deepening your understanding through practical projects.

At this point you start going back to the problems you encountered before and start diving into them one by one.

**[Hana]** Yes, I see it now. It’s like your horizon widens and you easily understand what you had problem with before, right?

**[Adel]** Exactly, in this way it’s a lot less overwhelming, a lot less anxiety, like you don’t have to understand every single detail at first.

being obsessed with finding the best resources

**[Adel]** you know what,

sometimes people don't even start working on (their goals) the thing that they're trying to self-study because they're **so obsessed with just making a study plan and finding the best resources** out there.

For example, let’s say if you're going to learn AI you might do some research, I can just Google like best resources to learn AI and you'll probably come across a variety of them for example Coursera, DataCamp, Udacity, Udemy some YouTube courses some books.

**it's an overwhelming selection of resources** so you might be spending a lot of time just trying to figure out which one is the best course, and you fall into the **Paradox of choice** which **causes a lot of anxiety.**

**Solution:**

**[Hana] In my opinion the solution for this:**

1. you should ask yourself **what the best way for me to learn**.
   1. It may be through video courses.
   2. it may be through online tutorials.
   3. it might be reading a book.
2. within that learning style, you should **just choose one of the top-ranked resources out there**. **I highly recommend just choosing one. (**and believe me it’s so much better to stick to only one or two max) (resources are well ranked for a reason so you should just trust the fact that they are well ranked by other people and realize that **it doesn't need to be perfect**)
3. if you hit a point in that resource where you don't feel like it's telling you that much anymore **you can just find another resource**

**[Adel]** That’s a great point. Another issue that I find really exhausting. Is **setting unrealistic expectations**, such as dedicating excessive hours to work or study, like 50 hours a week while neglecting self-care and hobbies, it may seem okay at first, but it often leads to burnout. This is very common, and it’s known as **the planning fallacy**, which happens when people underestimate the amount of time to complete a task.

**[Hana]** I used to set unrealistic goals that I struggle to achieve. I read about that in a book called **Finish** which recommends cutting the initially planned time commitment in half. if you think that you're going to commit like 50 hours a week for a topic it recommends that you cut that in half and set it as your goal.

Most people find that it was the right amount of time, and some people overachieve it. If you overachieve the goal, you just set it as a new goal, and you commit to it the next week.

**focusing on the wrong metric**

**[Adel]** Something else I find most people don’t consider, is focusing on the wrong metric.

**[Hana]** Focusing on the wrong metric!!!!!!! What do you mean?

**[Adel]** Ok, let me **tell you about input versus output-based metrics.**

**input-based metric** is something that you **have full control over**. For example, if you're trying to write an essay the input metric is the amount of time that you're spending in writing that essay.

while the **output metric** is **about the results** like completion of the whole task or part of it. We often tend to assess ourselves using output metrics only. However, **this can be a trap, as you lack full control over the output, unlike the input, which you can fully manage**. In many cases, an input-based metric, particularly time invested, proves effective because you have complete control over the time allocated.