

TECHNIQUES OF INDEPENDENT STUDY

MASTERING SUBJECTS WITHOUT GOING TO SCHOOL

PART 1: FINDING KNOWLEDGE

“The first student has no master, and must discover everything themselves. They research for 70 years, then write their wisdom into a book before they die. The second student reads the book, and in 7 years, they have learned 70 years of research. Then they do their own original research for 63 years and write a book containing 133 years of research. The third student reads for 13.3 years, then does their own research for 66.7 years, ending up with 200 years of research. Imagine going further and further.”

- From “Ars Longa, Vita Brevis” (Scott Alexander)

LEVEL ONE	Novice, High School Level	You know a few basic concepts and some fundamental theories.
LEVEL TWO	Adept, Undergraduate Degree	You have read 50-100 books and papers. You know enough to keep up in conversations with professionals.
LEVEL THREE	Professional, Masters Degree	You have read 250 books and papers, and written a couple of your own. You have credibility with experts.
LEVEL FOUR	Expert, Doctorate	You have read 600-800 books and papers. You have novel insights and are advancing the field.
LEVEL FIVE	World-Class, Top 5% of Experts	You are either world-famous or deserve to be. You win most debates on the basis of your incredible insight.

FREE AND CHEAP WAYS TO ACCESS KNOWLEDGE:

“You wasted \$150,000 on an education you coulda got for \$1.50 in late fees at the public library.” (Good Will Hunting)

- Google Scholar
- University Course Outlines
- Amazon
- Free-Access Academic Journals
- Lectures Posted on YouTube
- Emailing Experts and Professors

PART 2: ACQUIRING & PROCESSING KNOWLEDGE

DEVELOPING A SUPERHUMAN MEMORY:

- If you write something down, you don't have to remember it. You just have to be organized enough to remember where you wrote something down.
- Your notebooks, digital archives, book library, browser bookmarks, and phone are like an extended memory. They let you expand the size of your brain and think bigger.
- Using folders and other organizational technologies makes your extended brain easier to search. This saves you time and allows for faster and more focused thoughts.

TAKING EFFECTIVE NOTES:

Have one notebook for the things you learn from lectures and readings. Have a second notebook for your personal thoughts on what you learn. On top of that, make a habit of condensing your greatest insights into mind maps and essays. Not only will this allow you to acquire and master knowledge faster, but it will give you the ability to talk about what you know in powerful ways.

BOOKS TO READ:

- The 4-Hour Chef (Ferriss)
- How to Improve Your Mind (Flynn)
- Discourse on the Method (Descartes)
- Action Learning (Torbert)

PART 3: DISCOVERING NEW KNOWLEDGE

"A genius has three abilities, which are actually the union of scientist and amateur:

1. *To know the state of the art, what is known and what is not known.*
2. *To be able to think "out of the box" and research things from a new perspective.*
3. *To be disciplined enough to concentrate on the tedium of a formal investigation of their wondrous speculations."*

- From "Amateur, Scientist, Genius" (thelastpsychiatrist.com)

STRUCTURING A RESEARCH PROJECT:

1. Use Wikipedia, Google, and YouTube to gain general information on the topic.
2. Read three books that are considered "standard reading" or "essential reading".
3. Use Google Scholar and free access journals to acquire more specific information.
4. Purchase more specific or specialized books to dive deeper into your chosen topic.
5. Track unsolved mysteries, unanswered questions, and ongoing debates in the field.
6. Investigate related fields for potential answers to unsolved questions.
7. Begin developing your own hypotheses about your topic of study.
8. Conduct experiments, where possible, to investigate your hypotheses.