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UNIVERSAL COLLEGE OF ENGINEERING

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Applied Science and Humanities Department

THE MISSION

The department is carrying a mission to create and disseminate the knowledge and techniques in the intellectual areas of Engineering and other core areas of Applied Science and Humanities for the betterment of Ecosystem. To inculcate the importance of Applied Science and develop a natural flair for Engineering and Technology which in turn shall mold students into a competent professional.

THE VISION

The Department of Applied Science and Humanities committed to dynamically integrate the components Science, Humanities Engineering to groom students to transform them as globally acknowledged professionals.

To keep pace with fast developing scenario of technology and socio economic environment while planning to develop a world class technical institution.



CREATIVITY IS A PROCESS, NOT AN EVENT



In 1666, one of the most influential scientists in history was strolling through a garden when he was struck with a flash of creative brilliance that would change the world.

While standing under the shade of an apple tree, Sir Isaac Newton saw an apple fall to the ground. "Why should that apple always descend perpendicularly to the ground," Newton wondered. "Why should it not go sideways, or upwards, but constantly to the earth's center? Assuredly, the reason is, that the earth draws it. There must be a drawing power in matter."

And thus, the concept of gravity was born.

The story of the falling apple has become one of the lasting and iconic examples of the creative moment. It is a symbol of the inspired genius that fills your brain during those "eureka moments" when creative conditions are just right.

What most people forget, however, is that Newton worked on his ideas about gravity for nearly twenty years until, in 1687, he published his groundbreaking book, *The Principia: Mathematical Principles of Natural Philosophy*. The falling apple was merely the beginning of a train of thought that continued for decades. Newton isn't the only one to wrestle with a great idea for years. Creative thinking is a process for all of us. In this article, I'll share the science of creative thinking, discuss which conditions drive creativity and which ones hinder it, and offer practical tips for becoming more creative.

Intelligence and Creative Thinking

What does it take to unleash your creative potential?

As I mentioned in my article on Threshold Theory, being in the top 1 percent of intelligence has no correlation with being fantastically creative. Instead, you simply have to be smart (not a genius) and then work hard, practice deliberately and put in your reps.

As long as you meet a threshold of intelligence, then brilliant creative work is well within your reach. In the words of researchers from a 2013 study, "we obtained evidence that once the intelligence threshold is met, personality factors become more predictive for creativity."

Growth Mindset

What exactly are these "personality factors" that researchers are referring to when it comes to boosting your creative thinking?

One of the most critical components is how you view your talents internally. More specifically, your creative skills are largely determined by whether you approach the creative process with a fixed mindset or a growth mindset.

The differences between these two mindsets are described in detail in Carol Dweck's fantastic book, *Mindset: The New Psychology of Success* (audiobook).

The basic idea is that when we use a fixed mindset we approach tasks as if our talents and abilities are fixed and unchanging. In a growth mindset, however, we believe that our abilities can be improved with effort and practice. Interestingly, we can easily nudge ourselves in one direction or another based on how we talk about and praise our efforts.

How to Be More Creative?

Assuming that you are willing to do the hard work of facing your inner fears and working through failure, here are a few practical strategies for becoming more creative.

Constrain yourself.

Carefully designed constraints are one of your best tools for sparking creative thinking. Dr. Seuss wrote his most famous book when he limited himself to 50 words. Soccer players develop more elaborate skill sets when they play on a smaller field.

Designers can use a 3-inch by 5-inch canvas to create better large scale designs. The more we limit ourselves, the more resourceful we become.

Write more.

For nearly three years, I published a new article every Monday and every Thursday at JamesClear.com. The longer I stuck with this schedule, the more I realized that I had to write about a dozen average ideas before I uncovered a brilliant one. By producing a volume of work, I created a larger surface area for a creative spark to hit me.

Broaden your knowledge

One of my most successful creative strategies is to force myself to write about seemingly disparate topics and ideas. For example, I have to be creative when I use 1980s basketball strategies or ancient word processing software or zen buddhism to describe our daily behaviors. In the words of psychologist Robert Epstein, "You'll do better in psychology and life if you broaden your knowledge."

Embrace positive thinking.

It sounds a bit fluffy for my taste, but positive thinking can lead to significant improvements in creative thinking. Why? Positive psychology research has revealed that we tend to think more broadly when we are happy. This concept, which is known as the Broaden and Build Theory, makes it easier for us to make creative connections between ideas. Conversely, sadness and depression seems to lead to more restrictive and limited thinking

Ship it.

The honest truth is that creativity is just hard work. The single best thing you can do is choose a pace you can sustain and ship content on a consistent basis.

Commit to the process and create on a schedule. The only way creativity becomes a reality is by shipping.

Final Thoughts on Creative Thinking

Creativity is a process, not an event. It's not just a eureka moment. You have to work through mental barriers and internal blocks. You have to commit to practicing your craft deliberately. And you have to stick with the process for years, perhaps even decades like Newton did, in order to see your creative genius blossom.

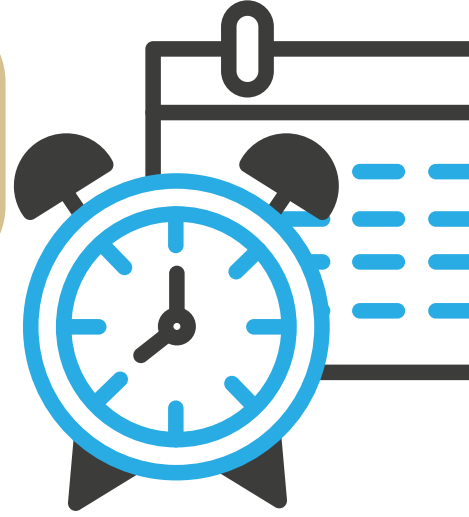
The ideas in this article offer a variety approaches on how to be more creative. If you're looking for additional practical strategies on how to improve your creativity habits, then read my free guide called Mastering Creativity.



Source : <https://jamesclear.com/creative-thinking>

Complied By: Jenisa D'silva

THE SCIENTIFIC ARGUMENT FOR MASTERING ONE THING AT A TIME



Many people, myself included, have multiple areas of life they would like to improve. For example, I would like to reach more people with my writing, to lift heavier weights at the gym, and to start practicing mindfulness more consistently. Those are just a few of the goals I find desirable and you probably have a long list yourself.

The problem is, even if we are committed to working hard on our goals, our natural tendency is to revert back to our old habits at some point. Making a permanent lifestyle change is really difficult.

Recently, I've come across a few research studies that (just maybe) will make these difficult lifestyle changes a little bit easier. As you'll see, however, the approach to mastering many areas of life is somewhat counterintuitive.

Too Many Good Intentions

If you want to master multiple habits and stick to them for good, then you need to figure out how to be consistent. How can you do that?

Well, here is one of the most robust findings from psychology research on how to actually follow through on your goals:

Research has shown that you are 2x to 3x more likely to stick with your habits if you make a specific plan for when, where, and how you will perform the behavior. For example, in one study scientists asked people to fill out this sentence: "During the next week, I will partake in at least 20 minutes of vigorous exercise on [DAY] at [TIME OF DAY] at/in [PLACE]."

Researchers found that people who filled out this sentence were 2x to 3x more likely to actually exercise compared to a control group who did not make plans for their future behavior.

Psychologists call these specific plans "implementation intentions" because they state when, where, and how you intend to implement a particular behavior.

This finding is well proven and has been repeated in hundreds of studies across a broad range of areas. For example, implementation intentions have been found to increase the odds that people will start exercising, begin recycling, stick with studying, and even stop smoking.

However (and this is crucial to understand) follow-up research has discovered implementation intentions only work when you focus on one thing at a time. In fact, researchers found that people who tried to accomplish multiple goals were less committed and less likely to succeed than those who focused on a single goal.

This is important, so let me repeat: developing a specific plan for when, where, and how you will stick to a new habit will dramatically increase the odds that you will actually follow through, but only if you focus on one thing.

What Happens When You Focus on One Thing

Here is another science-based reason to focus on one thing at a time:

When you begin practicing a new habit it requires a lot of conscious effort to remember to do it. After awhile, however, the pattern of behavior becomes easier. Eventually, your new habit becomes a normal routine and the process is more or less mindless and automatic.

But here's the thing: automaticity only occurs as the result of lots of repetition and practice. The more reps you put in, the more automatic a behavior becomes.

For example, this chart shows how long it takes for people to make a habit out of taking a 10-minute walk after breakfast. In the beginning, the degree of automaticity is very low. After 30 days, the habit is becoming fairly routine. After 60 days, the process is about as automatic as it can become.

The most important thing to note is that there is some "tipping point" at which new habits become more or less automatic. The time it takes to build a habit depends on many factors including how difficult the habit is, what your environment is like, your genetics, and more.

That said, the study cited above found the average habit takes about 66 days to become automatic. (Don't put too much stock in that number. The range in the study was very wide and the only reasonable conclusion you should make is that it will take months for new habits to become sticky.)

Change Your Life Without Changing Your Entire Life

Here's some practical takeaways

- You are 2x to 3x more likely to follow through with a habit if you make a specific plan for when, where, and how you are going to implement it. This is known as an implementation intention.
- You should focus entirely on one thing. Research has found that implementation intentions do not work if you try to improve multiple habits at the same time.
- Research has shown that any given habit becomes more automatic with more practice. On average, it takes at least two months for new habits to become automatic behaviors.

This brings us to the punchline of this article...

The counterintuitive insight from all of this research is that the best way to change your entire life is by not changing your entire life. Instead, it is best to focus on one specific habit, work on it until you master it, and make it an automatic part of your daily life. Then, repeat the process for the next habit.

The way to master more things in the long-run is to simply focus on one thing right now.

Source : <https://jamesclear.com/creative-thinking>

Complied By: Jenisa D'silva



STUDENT INDUCTION PROGRAMME

A Student Induction Programme was conducted for First year newly admitted students from 16th November to 18th November 2022. The purpose of the programme was to help new students adjust and feel comfortable in the new environment, inculcate in them the ethos and culture of the institution, help them build bonds with other students and faculty members, and expose them to a sense of larger purpose and self exploration. The programme included various meaningful sessions for the students ranging from Yoga to interaction with various functional heads of the Institute, student council and clubs and committees etc.

Department Familiarization



Energy Transformania



STUDENT INDUCTION PROGRAMME

Tower Making



UHV Session



Literary Activity



FACULTY ACHIEVEMENT



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