# **Creative Acts for Curious People**

Tags: #creativity #learning #talent-development #innovation

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## Dialogue

People's feelings about the word design. Traditionally people have thought about design as aesthetic finishing. There's been a shift for design to play a "broader role in society." What's the shift?

Despite the many pleasures of creativity, one of its toughest aspects is that there is almost always a part of your process that feels terrible. The good news is, you're not the only one who feels this way. The better news: that discomfort serves you.

Example: Myanmar project

You call the trough of despair essential. What's essential about it?

Zig Ziglar quote:

You can't climb a smooth mountain.

#### Spectrum:

Stuff you already know how to do.

Stuff that's completely over you head and you'll never likely do.

Then there's the middle zone -- hard but exciting.

The middle zone: you call it productive struggle.

Point --> different than Flow or being "in the zone."

You aim to do this in the design school. How do you do this?

How do you respond when people are in this midst of this?

It's helpful to turn the lens inward --> learning journey map.

Talking vs. doing

Seeking support from experienced person. "Lone genius myth."

Productive struggle often happens at critical moments -- where it's actually really predictable. What are those moments to watch for in ourselves -- and others?

Scaffolding helps. (Possible example: Test of silence.)

Although breakthroughs feel great, struggle is how you get there.

I used to think...and now I think...

#### Reserve

Exercise: The Test of Silence
Exercise: Learning Journey Map

### Quotes

Highlight [page 7]: Throughout the book I refer to the concept of design, a word that means different things to different people. The d.school is part of a global shift: from a world where designers have a very specific, narrow mandate predicated on the idea of design being mainly about aesthetic finishing to a world where design plays a broader role in society. One aspect of this shift in design has to do with inclusiveness: we fundamentally believe that everyone is creative and everyone can use design to improve the world around them. This aspirational way of thinking about design was described by the Hungarian painter László Moholy-Nagy in the 1940s: "Designing is not a profession but an attitude . . . it should be transformed from the notion of a specialist function into a generally valid attitude of resourcefulness and inventiveness."

Highlight [page 103]: Here's why it's critical that you don't share your intent or explain your work ahead of time to your testers. Doing so reminds them of how invested you are in the work. It also comes across as a subtle defense mechanism, and your testers' very human tendency to spare your feelings will make the feedback less real and honest. Somehow, hard feedback has become equated with being mean. A structured approach to critique helps both you and the people you're asking for help to overcome that problem. We created an elaborate method for critiques in a class on digital design, which this assignment borrows from. Everyone turns in their device with their half-finished work loaded on it. The unlocked device is put on a table that has an overhead camera (video image, no sound). One person sits at the table to explore the work and has five minutes to use the device in front of the whole class, without knowing whose it is, while narrating their experience. The scene is being projected on a screen so everyone can see it.

Highlight [page 109]: Despite the many pleasures of creativity, one of its toughest aspects is that there is almost always a part of your process that feels terrible. The good

news is, you're not the only one who feels this way. The better news: that discomfort serves you.

Highlight [page 110]: What I have come to realize is that the trough of despair isn't just normal, it's essential. The negative feelings you experience in the trough tell you whether the work you're doing is hard or complex enough to deserve your full creative attention. Only challenges that don't have easy answers require you to take the kinds of difficult creative leaps that lead to breakthroughs. Only work that requires you to push yourself to develop new skills—not just deploy the ones you already have—keeps you on the edge of your own learning curve and, therefore, reaching toward your full potential.

Highlight [page 110]: If you dive deeper into the trough of despair (metaphorically, please), you'll find different names for it. My favorite is "productive struggle." This term comes from research and practice in mathematics education. It turns out that students who effortlessly solve a math problem get fewer right answers when they face similar problems in the future, as compared to students who struggle with the initial problem. The lesson is that your learning is deeper and you retain more of the knowledge when it takes some time and effort to figure out how to do something. I think of this fact whenever I see the proverb "Smooth seas rarely make skilled sailors."

Highlight [page 110]: The tension you experience in between the bright possibility of a breakthrough and being off-balance while struggling to get there is embedded in every assignment in this book and most learning experiences we design at the d.school. We like to sit right in that uncomfortable place. We do that by asking our students to work on projects that don't have simple, clear answers. We put them on teams of people with disciplinary and cultural backgrounds unlike their own and teach them how to value and take advantage of the divergent thinking that results. We help them adopt a mindset of discovery. We give them experiences of drawing knowledge not just from expertise and past experience, but also from building, action, and experimentation. Sounds amazing, right? However, in practice this often feels like, well, a struggle!

Highlight [page 110]: It's really useful to recognize both when and why you are struggling. The natural instinct to first rail against the external circumstance ("It's too much work; the project is too complicated") just distracts you from turning the lens inward. A more constructive approach is to use your own past experiences as fodder for understanding how you work and learn best. To do this right now, go to page 246 and make a learning journey map to help you investigate and assess your own experiences with productive struggle.

Highlight [page 110]: When it comes to tackling new challenges, there are many things that you already know how to do. This zone feels easy and familiar. There are also some things that you'll never be able to do, and if you wander into this space, you might feel panic. And then there are lots of things that you can do, as long as you have a bit of guidance. This zone feels hard, and also exciting. It's the feeling of I'm not sure, but I'd like to try. Its formal name is the "zone of proximal development," first described by

psychologist Lev Vygotsky in the 1920s and '30s. Basically, this zone is the one in which you can do more today than you knew how to do yesterday, as long as what you're doing is something just a little beyond your current abilities and you've got some help.

Highlight [page 111]: You may be familiar with the phrase "in the zone" as it relates to a flow state, where everything you do seems effortless and perfect, and you're not even sure how you're doing it so beautifully. That's great when it happens, but I'm talking about something really different here—the challenging zone that you actively embrace in order to experience struggle. When you are beginning to struggle, you can turn to a set of practices that help you activate the guidance that you need, which is how you can flip the switch from unproductive struggle into struggle that helps you in the long run.

Highlight [page 111]: The easiest form of guidance involves seeking help from someone more experienced than you, so you can see how they would handle your uncertainty and ambiguity regarding your specific situation. This sounds obvious, but since the arena of creativity is suffused with the myth of the lone genius who is just naturally gifted in their craft, it's worth saying explicitly: you don't have to suffer alone; you don't have to figure out everything for yourself. Don't let moments when you need help derail your work for fear of exposing your weaknesses. Your chosen experts can be helpful in developing your concrete skills to solve a particular problem, and they also might help you just because they've been through enough cycles to know how to anticipate and deal with the struggle when it occurs.

Highlight [page 111]: The process seems mysterious until you've had and reflected on enough of your own experiences. You'll find that in creative work, productive struggle happens at certain critical moments—to the point that it's almost predictable. One of those moments is while you are making sense of your observations and findings to figure out what direction your work should take. Another is when you or your team is trying to converge or decide. Even if you're working on your own, reconciling competing perspectives about what to do when you're working on ambiguous problems is just plain hard. No one can tell you you're making the "right" decision. You cannot be certain, and that's rough.

Highlight [page 111]: Another moment that commonly provokes struggle is receiving difficult feedback. (To work on this, try out The Test of Silence on page 193.) Knowing that these hard times (and others) are universally challenging is one way that working alongside more experienced practitioners can help you, and you'll soon start to notice and be able to anticipate these moments for yourself.

Highlight [page 111]: Tools and frameworks are liberating: they help people to see more of what can come from within."

Highlight [page 111]: As you continue to develop new and personal approaches to supporting and stretching your own creative work, remember that although breakthroughs feel great, struggle is how you get there. This tension—that the thing you want (a breakthrough) is something that you actually don't want to come by easily—is

simply one of the big ironies, joys, and perhaps even mysteries of creativity. Make the space for yourself to dwell in the tension, in an effortful struggle, to set yourself up to produce more impactful, beautiful, or satisfying work now and in the future. Everything you tackle creatively using the design abilities and mindsets that you're exploring in this book is an opportunity both to make something good right now and to prepare yourself for the next big challenge.

Highlight [page 129]: Draw a new line on your map that shows the ups and downs of your learning journey, from negative events at the bottom to more positive ones at the top, using points in time from your list. Use a solid line, or a specific bright color, like blue. Chart the ups and downs: when were you learning a lot? When did you stall out? Sometimes it helps to start with either your highest high or your lowest low—to anchor your map in a scale that is relevant to your experience. On the same map add a second line, using either a different color, like orange, or a distinct style, like dashes. This one will show your emotional journey. When did you feel elated or excited? When were you frustrated or nervous?

### References