

What We Learn From Doodles

by Sunni Brown

<http://www.cnn.com/2011/09/01/opinion/brown-creativity-doodles/>

Humans have been doodling in snow, in sand and on cave walls for more than 30,000 years.

George Washington, Thomas Edison, John F. Kennedy, Lyndon Johnson, Ronald Reagan and Vladimir Nabokov were doodlers. Bill Gates and Frank Gehry are among today's active doodlers.

Yet most of us haven't reflected on why we feel compelled to draw.

In fact, many parts of our society -- including businesses, schools and colleges -- frown on doodling and consider it a waste of time. While we can't overcome cultural biases overnight, we can certainly ask a relevant question: Why is doodling so universal? What is doodling doing for us?

Virginia Scofield, an immunologist at the University of Texas at San Antonio, knows from personal and professional experience what doodling does. After struggling with organic chemistry in college, she decided to try doodling the complexities of the subject rather than memorizing them from the textbook. Scofield happened upon what native doodlers have known for a long time: Doodling can improve cognitive performance. Because of her success in transforming her own learning process, Scofield incorporated doodling and visual note-taking into her university classroom for more than two decades, and she told me it notably improved the success rate of her students.

Scofield is not the only one who's learned to be impressed by the Doodle. Jackie Andrade, a professor at the University of Plymouth, published a study finding a 29 percent increase in information retention gained by doodlers. She noted that, contrary to popular belief, doodling seems to prevent people from losing focus on boring or complex subject matter. It gives learners who may otherwise mentally check out an opportunity to check back in.

Other researchers exploring the impact of doodling and drawing have come to equally significant conclusions about this deceptively simple act. A recent article in *Science* argued that drawing in science education caters to individual learning preferences and motivates students to engage and explore content in a more meaningful way. And classroom research shows that not only do learners better understand concepts through simple drawing, but it sets the stage for innovative and divergent ways of thinking. For a nation with an ego wounded by our decreased scores on the Torrance Creativity Test, this unfettered access to creative thinking shouldn't be underestimated.

Just ask Google, the only company on record with an official Chief Doodler on the payroll. Google's culture is well known for its 80/20 "innovation time off" rule. And for many employees, that time is spent using simple visual language to doodle, sketch and prototype new business opportunities. Indeed, many companies seeking an edge are looking to applications of hand-drawn visual language as a prospective lifeboat. In a hyper-competitive marketplace, thinkers need all the mojo they can muster.

To the throngs of doodlers around the world, this evidence is likely just the beginning of our gentle "I told you so" moments. Learning that accommodates more than text-based or verbal information amplifies the effects of cognition and creativity. And when the *Science* article suggested that drawing should be recognized along with reading, writing and speaking as a key element in education, it was a hallelujah moment for doodlers around the world.

I'm one of them. I use doodling for a variety of reasons: I use it to get clarity around a concept, I use it to relax, I use it to communicate ideas with others and get their refinement of them, I use it to map complex

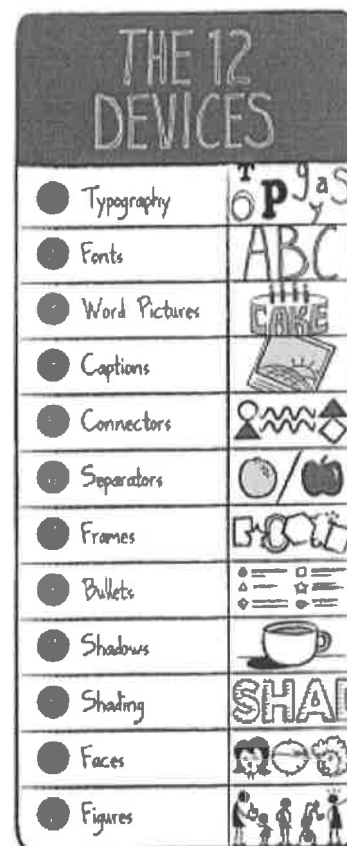
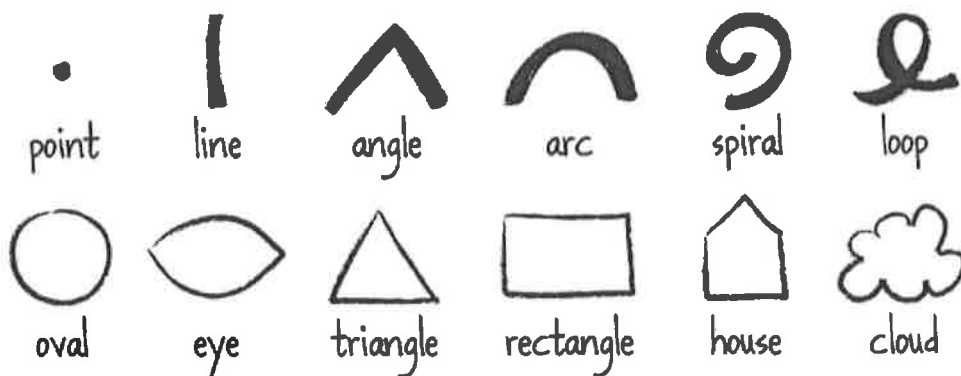
systems for companies, I use it to run innovation games for business, I use it to get insight on something puzzling me.

So how do you get better at doodling? It's a delightfully easy task. Learners can start with the Visual Alphabet, a series of six flows—the point, line, arc, angle, spiral and loop, and the six forms—the oval, eye, triangle, rectangle, house and cloud. With these 12 "letters," prospective doodlers can articulate any visual representation of any concept they can imagine. All it takes is a commitment to learning this language, native to our brain's visual cortex, and applying it to challenges either at work or at school. Rather than talking in circles about a complex subject, try doodling it using words and pictures. Show your teachers and colleagues another way to see information. The insights and aha moments will arrive naturally in the process.

HOW TO DOODLE

<http://www.fastcocreate.com/3034356/heres-why-how-and-what-you-should-doodle-to-boost-your-memory-and-creativity>

Your ability to accurately render a cow or tree does not make doodling a more effective creative tool. "It's not art class," says Sunni Brown. But it does help to have a visual alphabet. Like the ABCs, Brown teaches her clients 12 basic shapes—including dots, lines, angles, spirals, and triangles. "When you have that alphabet available to you, you start to break the world down into visual components. A tree becomes a line with a bunch of other lines branching off." Soon, you realize that you can draw almost any object—or an approximation of it. Doodling works the best when it's spontaneous, which means your brain can't be worrying about how to sketch that rocket ship. All that matters, says Brown, is that your doodles "let you see something that you didn't see before."



NAME: _____

HOMEWORK: Info-doodling practice **DUE:** Friday, September 25th

10 points

“While doodling has often been seen as frivolous at best and distracting at worst, the idea of sketchnoting has grounding in neuroscience research about how to improve memory. When ideas and related concepts can be encapsulated in an image, the brain remembers the information associated with that image. William Klemm, a professor of neuroscience at Texas A&M University, says the process is akin to a zip file.” (<http://ww2.kqed.org/mindshift/2015/07/15/making-learning-visible-doodling-helps-memories-stick/>)

TASK: After reading the article about doodling, create an info-doodle or sketch note that summarizes the key information and shows your understanding. You do not need to use color but if it will help you in retaining the information, please do use color pencil.