Creative Confidence
Tom Kelly, David Kelly—2013.

Introduction: the heart of innovation

- At its core, creative confidence is about believing in your ability to create change in the world around you. It is the conviction. That you can achieve what you set out to do. We think this self-assurance, this belief in your creative capacity, lies at the heart of innovation.
- Creative confidence is like a muscle—it can be strengthened.
- One recent IBM survey of more than 1,500 CEO reports that creativity is the single most important leadership competency for enterprises facing the complexity of global commerce today. An Adobe Systems poll of five thousand people on three continents reports that 80 percent of people see unlocking creative potential as key to economic growth. Yet only 25 percent of these individuals feel that they’re living up to their creative potential in their own lives and careers. That’s a lot of wasted talent.
- Geshe Thupten Jinpa, who has been the Dalai Lama’s chief English translator for more than twenty years, shared an insight with us recently about the nature of creativity. Jinpa pointed out that there’s no word in the Tibetan language for “creativity” or “being creative.” The closest translation is “natural.” In other words, if you want to be more creative, you just have to be more natural.
- After four decades of experience, an elementary school teacher restructured her curriculum into design challenges. Instead of teaching discrete subjects, she created projects that covered the same topics but got students to step away from their desks and think more critically. Their test scores improved, but more important, parents noticed their children were more engaged and inquisitive.
- As legendary psychologist and Stanford professor Albert Bandura has shown, our belief systems affect our actions, goals, and perception. Individuals who come to believe that they can effect change are more likely to accomplish what they set out to do. Bandura calls that conviction “self-efficacy” People with self-efficacy set their sights higher, try harder, persevere longer, and show more resilience in the face of failure.

CHAPTER 1: flip, from design thinking to Creative Confidence

- Because they are so scared that they can’t He still long enough. As many as 80 percent of pediatric patients have to be sedated. And if an anesthesiologist isn’t available, the scan has to be postponed causing families to go through their cycle of worry all over again.
- When Doug witnessed the anxiety and fear his machine caused among the most vulnerable patients, the experience triggered a personal crisis for him that forever changed his perspective. Rather than an elegant, sleek piece of technology^ worthy of accolades and admiration, he now saw that—through the eyes of a young child—the MRI looked more like a big scary machine
- Just before the whirring and banging of the machine gets louder, the operator encourages young patients to listen closely for the moment that the craft “shifts into hyper drive.” This reframing transforms a normally terrifying “BOOMBOOM-BOOM” sound into just another part of the adventure
• The hospital and GE were happy too because less need for anesthesiologists meant more patients could get scanned each day. Meanwhile, patient satisfaction scores went up 90 percent.

• Many successful programs include a variation on four steps: inspiration, synthesis, ideation/experimentation, and implementation.

• Individuals with a growth mindset, Dweck says, “believe that a person’s true potential is unknown (and unknowable); that it’s impossible to foresee what can be accomplished with years of passion, toil, and training.” She makes a compelling case, backed up by extensive research, that regardless of our initial talent, aptitude, or even IQ, we can expand our capabilities through effort and experience.

• With creative confidence comes the desire to proactively guide the course of your life, or your organization, rather than be carried along on the prevailing winds. Roger Martin, dean of the University of Toronto’s Rotman School of Management, once told us that what stuck out to him about designers is that they always act with intention. While others may unconsciously go with the default option, design thinkers make everything a conscious and original choice: from how they arrange their bookshelf to how they present their work. When they look around the world, they see opportunities to do things better and have a desire to change them. Once you start creating things, whether it’s laying out a new garden or starting a new company or writing a new piece of code, you start to realize that everything has that intention behind it. Everything in modern society is the result of a collection of decisions made by someone. Why shouldn’t that someone be you?

• When you unleash your creative confidence, you start to see new ways to improve on the status quo—from how you throw a dinner party to how you run a meeting. And once you become aware of those opportunities, you have to start seizing them. To us, that focused “intentionality” was one of Steve Jobs’ defining characteristics. David met Steve back in 1980 when we designed the first Apple mouse. They became friends during a dozen subsequent projects for Steve’s ventures at Apple, NeXT, and Pixar. Steve never took the path of least resistance. He never accepted the world “as is.” He did everything with intentionality. No detail was too small to escape his attention.

• Once you start creating things, you realize that everything has intention behind it.

CHAPTER 2: Dare, from fear to courage.

• The process of guided mastery draws on the power of firsthand experience to remove false beliefs. It incorporates psychology tools like vicarious learning, social persuasion, and graduated tasks. Along the way, it helps people confront a major fear and dispel it one small, manageable step at a time.

• This newfound courage, exhibited by the same people who once had to wear hockey masks to get near a snake, led Bandura to pivot toward a new line of research: how people come to believe that they can change a situation and accomplish what they set out to do in the world. Since then, Bandura’s research has shown that when people have this belief, they undertake tougher challenges, persevere longer, and are more resilient in the face of obstacles and failure. Bandura calls this belief “self-efficacy.”

• In our experience, one of the scariest snakes in the room is the fear of failure, which manifests itself in such ways as fear of being judged, fear of getting started, and fear of the unknown. And
while much has been said about fear of failure, it still is the single biggest obstacle people face to 
creative success.

- A widely held myth suggests that creative geniuses rarely fail. Yet according to Professor Dean 
  Keith Simonton of the University of California, Davis, the opposite is actually true: creative 
eniuses, from artists like Mozart to scientists like Darwin, are quite prolific when it comes to 
failure—they just don’t let that stop them. His research has found that creative people simply do 
more experiments. Their ultimate “strokes of genius” don’t come about because they succeed 
more often than other people—they just do more period.

- Albert Bandura used the process of guided mastery—a series of small successes—to help people 
gain courage and overcome deep seated phobias. What would have been nearly impossible to 
accomplish in one giant leap became manageable in small steps. With the guidance of someone 
knowledgeable in the field

- For this reason, we frequently ask students and; team members to complete multiple quick design 
projects rather than one big project, to maximize the number of learning cycles.

- Facing failure in order to wipe away the fear is something understood intuitively by our friend 
John “Cass” Cassidy, lifelong innovator and creator of Klutz Press. In his book juggling for the 
complete Klutz, Cass didn’t start us out juggling two balls, or even one. He began with something 
more basic: “The Drop.” Step one is simply to throw all three balls in the air and let them drop. 
Then repeat. In learning to juggle, the angst comes from failure from having the ball fall to the 
floor. So with step one, Cass aims to numb aspiring jugglers to that, waving me ball tall to the 
floor becomes more normal than the ball not fitting the floor. After we address our tear of failure, 
juggling becomes a lot easier. The two of us were skeptical at first, but with the help of his simple 
approach, we really did learn to juggle.

- We just need to hold out a “reasonable hope of success,” as well as the possibility of a truly epic 
win. For that if team members believe that every idea gets fair consideration, and that a 
meritocracy allows their proposals to be judged across divisional and hierarchical lines, they tend 

to put all of their energy and their creative talents to work on ideas and proposals for change. 
They work harder, persist longer, and maintain their urgent optimism when they believe victory is 
just around the corner.

- Diego Rodriguez in his blog metacool

- When it comes to bringing new stuff into the world, Diego argues that the number of product 
cycles you’ve gone through (what he calls “mileage”) trumps the number of years of experience. 
A twenty-year veteran of the auto industry who works several years on each new vehicle before it 
goes to market might have experienced far fewer cycles than a software developer working just 
two years on mobile apps that ship every couple of months.

- As part of HackFWD’s “Geek Agreement”—published on the firm’s website—entrepreneurs are 
paid roughly their current salary for a year as they push their concept toward the beta stage and 
one step closer to market and profitability.

- “That’s terrible. That doesn’t look anything like a horse.” Brian’s shoulders sank. Dejected, he 
wadded up the clay horse and threw it back in the bin. David never saw Brian attempt a creative 
project again. How often does something like that happen in childhood? Whenever we mention 
lost-confidence stories like Brian’s to business audiences, someone always comes up to us 
afterward to share a similar experience when a teacher or parent or peer shut them down.
• Author and researcher Brene Brown, who has interviewed scores of people about their experiences with shame, found that one third of them could recall a “creativity scar,” a specific incident when they were told they weren’t talented as artists, musicians, writers, singers.

• As schools cut funding for the arts and high-stakes testing becomes more pervasive, creativity itself is devalued, compared to traditional core subjects like math and science. Those subjects emphasize ways of thinking and problem solving.

• Education expert Sir Ken Robinson claims that traditional schooling destroys creativity. “We’re now running national education systems where mistakes are the worst thing you can make,” he says. “Education is the system that’s supposed to develop our, natural abilities and enable us to make our way in the world.

• Sir Ken told us a memorable story about talent that almost went to waste. He was born in Liverpool and made a discovery one day while talking to fellow Liverpudlian Paul McCartney. Apparently, the legendary singer-songwriter had not done especially well in his musical studies. His high school music teacher had neither given McCartney good marks nor identified any particular musical talent in him. George Harrison had the same teacher and had likewise failed to attract any positive attention in music class. “Let me get this straight,” Sir Ken asked McCartney in amazement, “this teacher had half of the Beatles in his classes and didn’t notice anything out of the ordinary!?” Lacking encouragement from the person best positioned to nurture their musical talents, McCartney and Harrison could have “played it safe” and gone to work in Liverpool’s traditional manufacturing and shipping industries. But that “safe” route would have put them in the center of a downward economic spiral. Liverpool’s heavy industry declined precipitously in the following two decades, leading to dizzying unemployment in their hometown and eventually to the closing of the school they had attended, the Liverpool Institute High School for Boys. Luckily for music fans, McCartney and his friends John, George, and Ringo found encouragement elsewhere.

• Our experience mirrors current research on resilience. Resilient people, in addition to being resourceful problem solvers, are more likely to seek help, have strong social support, and be better connected with colleagues, family, and friends. Resilience is often thought of as a solo effort—the lone hero who fails and rises up again to do battle. In reality, however, reaching out to others is usually a strategy for success. It doesn’t have to be an admission of weakness. We need others to help us bounce back from adversity and Hardship.

• He does this by dissociating artistic drawing from drawing for communication. One of the lessons in his web-based “Napkin Academy” is called “How to Draw Anything.” He insists that everything you ever need to draw on a whiteboard—or on a napkin—can be deconstructed into five basic shapes: a line, a square, a circle, a triangle, and an irregular shape he calls a blob. Next, he explains drawing fundamentals—such as size, position, and direction—that can seem comically simple yet still go underused. On the topic of size, for example, if you make one object bigger than another...

• “Courage is only the accumulation of small steps.’

• Creativity, far from requiring rare gifts and skills, depends on what you believe you can do with the talents and skills you already have.
Chapter 3: Spark, from blank page to insight

- One of the teaching assistants in the class, Sarah Stein Greenberg (now managing director of the d.school), for advice. She told them, “You know, given a choice, I’d say, go after the hard challenge. That’s what puts the ‘extreme’ in Extreme Affordability.” So instead of creating another hospital incubator, they reframed the design challenge as: How might we create a baby-warming device that helps parents in remote villages give their dying infants a chance to survive?
- They took the prototype to India, where they sought to understand the cultural nuances that could lead mothers to accept
- When Rahul told the moms to warm the heating pouch to thirty-seven degrees Celsius to help regulate the baby’s temperament, he got a surprising and unsettling response. One of the village mothers explained that in her community they believed Western medicines were really powerful, and often too strong. So if the doctor prescribed one teaspoon of medicine for her baby, she told Rahul, “I give him just half a teaspoon. Just to be safe. So if you ask me to heat it to thirty-seven, just to be safe I would heat it only to thirty or so.” Alarm bells went off in Rahul’s head. Traditional engineers might have blamed this on random ‘user error” and moved on. But the Embrace team just iterated the design. Now, when the baby warmer reaches the correct temperature, an indicator simply changes to “OK,” so there is no numeric value for parents to second-guess. In this instance, prototyping with end users in the field led to an improvement that could make the difference between life and death.
- The whole philosophy of Embrace is that you have to be close to your end-user to make a really good design

CULTIVATE A CREATIVE SPARK

- Embrace began in Silicon Valley. But innovation—whether driven by an individual or a team—can happen anywhere. It’s fueled by a restless intellectual curiosity, deep optimism, the ability to accept repeated failure as the price of ultimate success relentless work ethic, and a mindset that encourages not just ideas, but action. The creative spark needed to come up with new solutions is something you have to cultivate, over and over again. One way to begin is to consciously increase the inspiration you encounter in your daily life. Over the years, we’ve found several effective strategies to help you get from blank page to insight:
  o CHOOSE CREATIVITY: To be more creative, the first step is to decide you want to make it happen.
  o THINK LIKE A TRAVELER: Like a visitor to a foreign land, try turning fresh eyes on your surroundings, no matter how mundane or familiar. Don’t wait around for a spark to magically appear. Expose yourself to new ideas and experiences.
  o ENGAGE RELAXED ATTENTION: Flashes of insight often come when your mind is relaxed and not focused on completing a specific task, allowing the mind to make new connections between seemingly unrelated ideas.
  o EMPATHIZE WITH YOUR END USER: You come up with more innovative ideas when you better understand the needs and context of the people you are creating solutions for.
DO OBSERVATIONS IN THE FIELD: If you observe others with the skills of an anthropologist, you might discover new opportunities hidden in plain sight.

ASK QUESTIONS, STARTING WITH “WHY?” A series of “why?” questions can brush past surface details and get to the heart of the matter. For example, if you ask someone why they are still using a fading technology (think landline phones), the answers might have more to do with psychology than practicality.

REFRAME CHALLENGES: Sometimes, the first step toward a great solution is to reframe the question. Starting from a different point of view can help you get to the essence of a problem.

BUILD A CREATIVE SUPPORT NETWORK: Creativity can flow more easily and be more fun when you have other to collaborate with and bounce ideas off.

Psychologist Robert Sternberg, who has done extensive research on intelligence, wisdom, creativity, and leadership for over thirty years, tells us that all of the creative people he has studied had one thing in common: at some point, they decided to be creative. They tend to:

- Redefine problems in new ways in order to seek out solutions.
- Take sensible risks and accept failure as part of the innovation process.
- Confront the obstacles that arise when challenging the status quo.
- Tolerate ambiguity when they are not certain that they are on the right path.
- Continue to grow intellectually rather than let their skill knowledge stagnate.

One day at home, Jill chose to be more creative. She signed up for Pinterest, a social network for visually collecting and sharing online content like fashion ideas, recipes. And DIY projects. Before a friend’s Cinco de Mayo party, she “pinned” a recipe for piñata cookies. Made of three layers with space in the middle one for a hidden cache of mini M&Ms, the colorful cookies captured people’s imaginations. Within a week, her idea got repined more than five hundred times. Jill kept at it, and to her surprise, people really liked her creative style. When her followers grew to over 100,000, she caught the attention of Pinterest itself. They featured her on the site, and by late 2012, Jill had attracted a million followers.

We learned a lot when we traveled not because we are any smarter on the road, but because we pay such close attention.

Rediscovering the familiar is a powerful example of how looking at something closely can affect what you see. So apply a beginners mind to something you do or see every day.

David often places a whiteboard marker in his shower so he can write a passing idea on the glass wall before it slips away.

Observing people in their natural habitat can be difficult—particularly for those who think they’re experts already. If you work at a big pharmaceutical company, for example, you probably already know how people take their medicine, right? Empathy means challenging your preconceived ideas and setting aside your sense of what you think is true in order to learn what actually is true.

In the kitchen we saw customer behaviors that pointed to other, less obvious needs. After using the scoop, a number of people absent-mindedly licked the ice cream off the scoop before putting it in the sink. We realized that a really great ice-cream scoop would not only be good at getting ice cream out of the carton, it would also lend itself to licking off that last bit of ice cream when you were done with the job. So we set out to make a “mouth-friendly” scoop. For starters, that meant ensuring no sharp edges or moving parts that a tongue could catch on.
• Kara and Tom noticed that the young Japanese woman in front of them was wearing brightly colored sneakers. What caught their eye was not merely the vibrant color among the millions of black shoes in Shinjuku that day. More unusual was the fact that her shoes didn’t match, both shoes had the same contemporary style, but her left shoe was turquoise blue, while the right was a hot pink. What were they seeing? Their first theory was that she owned another pair of shoes almost exactly like those at home—but with the turquoise shoe on the right, of course. Theory number two was that she had a girlfriend with the same shoe size. But theory number three was the most intriguing: that there was a marketing opportunity for selling mismatched footwear.

• Tom was sorely tempted to reject that “silly” idea out of hand. What he didn’t realize at the time, however, was that there was already a thriving business around the concept of mismatched socks. A company called LittleMissMatched sold them, with the slogan “nothing matches but anything goes.” Its revenues grew from $3 million to $25 million in three years during its initial startup, and it has continued to be successful ever since.

• As the American writer Mark Twain said a century ago, “It’s not what you don’t know that gets you into trouble, it’s what you know for sure that ain’t so.” Don’t be fooled by what you “know for sure” about your customer, yourself, your business, or the world.

• Her teammate gently stepped in, took a seat next to the boy, and started to engage him in a casual conversation about the game he was playing on his phone. As Amanda watched, the boy opened up, eventually talking not only about his disease but also about his family, his day-to-day life, and how he felt about his doctor and his medication. Amanda realized that she usually conducts a completely different conversation, one that builds patient histories and treatment plans rather than establishing empathy. “When I get into the hospital, it’s hard not to go to my traditional role,” Amanda says. “But by approaching the interview from a different perspective, we learned so much and got so much further than we would have with my usual pointed questions.”

• Coe Leta Stafford, a veteran IDEO design researcher with a PhD in cognitive development, has lots of experience asking questions of potential end users. One way she brings questions to life is by making them playful. Instead of asking “Why do you like this book so much?” she’ll turn it into a game: “Pretend you wanted to convince a friend that they should read this book, what you would tell them?” She reframes the question in a way that sidesteps some of the “business as usual” responses and elicits more meaningful answers.

• Even challenging questions can be framed in ways that help get past cultural or “political” barriers. For example, when Coe Leta wants to understand where an innovative approach might encounter in-house resistance, she suggests, “Imagine you have an ‘invincibility’ coat that lets you overcome challenging processes or people. Where or when would you use this coat?” The right question can make all the difference.

• Empathy is more about understanding latent need seven if people can’t articulate them to you. By watching real people and their actions, you can learn things you’d never find out if you asked them straightforward questions.

• At IDEO’s Munich office, we call the reframed challenge “Question Zero,” since it is a new starting point for seeking creative solutions.
Chapter 4: leap, from planning to action.

- The result of their intense effort, rapid iteration, and relentless action was Pulse News, an elegant news reader launched in 2010 that aggregates stories from both traditional and emerging publishing sources. It was so successful that a few months after launch—while Ankit and Akshay were still students—Steve Jobs showed off Pulse from the main stage of the Apple Worldwide Developers Conference, focusing global attention on the two introverts and their app. Today, Pulse has been downloaded by more than twenty million people and stands as one of the original fifty apps in Apple’s App Store Hall of Fame. And recently, Ankit and Akshay accepted an offer of $90 million from LinkedIn for the company they built with design thinking. Looking back on those first couple months of Pulse, the founders got a lot of things right:
  - They started with a “do something” mindset and were not content to merely comply with the standard requirements of their graduate programs.
  - They minimized planning and maximized action, knowing that the results of early experiments might quickly render even the best-laid plans obsolete. They started interacting with potential customers right away.
  - They prototyped quickly and cheaply, fueling thousands of variations that ultimately resulted in their wildly popular final product.
  - They thrived in spite of—maybe even because of—their time constraints, spurred on by necessity to develop creative ideas at a blistering pace.
- John Keefe, a senior editor at Manhattan radio station WNYC when they heard his colleague lament about how often her mom was waiting at city buses.
- Within twenty-four hours, he created a working prototype of a service that allowed bus riders to call in, input their bus stop number, and hear the location of the next approaching bus (even without a Smartphone).
- To bring the idea to life in such a short time, John had to get creative about using existing services. He bought a toll-free phone number for a dollar per month from Twilio, a service that connects a telephone number to a web-based program. He wrote a small program that sends the bus stop code to the NYC Metropolitan transit Authority site, accessing real-time location data.
- Our point? The first step toward being creative is often simply to go beyond being a passive observer and to translate thoughts into deeds. With a little creative confidence, we can spark positive action in the world. So the next time you start to say “Wouldn’t it be great if . . . ?” just take a moment, remember John Keefe, and tell yourself “Maybe I can finish it by the end of the day.”
- In corporate cultures, that hesitation can translate into what professors Bob Sutton and Jeffrey Pfeiffer call the “knowing-doing gap”: the space between what we know we should do and what we actually do. It can lead to company paralysis when talk becomes a substitute for action.
- For starters, tradition got in the way of innovation. Kodak’s glorious past was just too alluring. Kodak had essentially owned consumer photography for a hundred years, with market share in some segments as high as 90 percent. By contrast, digital ventures all seemed so risky, and Kodak wasn’t providing enough “soft landings” for managers willing to take career risks in those new areas. Facing strong global competitors in the digital market. Kodak knew that it would struggle, and fear of failure transfixed the management team.
Caught in the knowing-doing gap, Kodak clung too closely to the chemistry-based business that had been so successful for them in the twentieth century, under investing in the digital world of the twenty-first. What we saw at Kodak was not a lack of information but the failure to turn insight into effective action.

The d.school’s academic director Bernie Roth demonstrates this idea with a brief exercise that his students say delivers a lasting message. He holds out a water bottle and asks them to try to take it from him. Facing gray-haired Bernie, a fifty-year veteran of the Stanford Design Program, students usually hesitate as they try to grab it from him. Their initial efforts yield nothing. His grasp just grows more ironclad as the strapping twenty-year-olds and powerful CEOs try to wrestle the bottle away from the octogenarian Bernie then reframes the exercise. He says to stop trying and just do it—take it from him. The next person strides forward and successfully wrenches the bottle away. What changed? As Bernie explains it, a subtle excuse lies in the idea of “trying.” It’s as if today is for attempts, and the real action will happen at some vague future moment. To achieve your goal, to topple the barriers that stand in your way, you have to be focused on getting it done now.

In other words, to ultimately reach a creative breakthrough. You just need to start, regardless of small failures that may occur along the way.

This lesson was brought to life for us in a story from the insightful book Art & Fear. A clever ceramics instructor divided his pottery class into two groups during the first session. One half of die students, he announced, would be graded on quality as represented by a single ceramic piece due at the end of the class, a culmination of all they had learned. The other half of the class he would grade based on quantity. For example, fifty pounds of finished work would earn them an A. Throughout the course; the “quality” students funneled their energy into meticulously crafting the perfect ceramic piece, while the “quantity” students threw pots nonstop in every session. And although it was counterintuitive to his students, you can guess how his experiment came out: at the end of the course, the best pieces all came from students whose goal was quantity, the ones who spent the most time actually practicing their craft.

Perry Klebahn tells business professionals in the d.school’s executive education program “Don’t get ready, get started!”

TACKLE A “DOABLE” PIECE OF THE PROBLEM. To get under way, work on the easiest part first. One technique we use for finding the easy part of a challenge is by constrained voting. At the end of a brainstorm or ideation session, there may be a hundred ideas represented by Post-it notes covering the wall. Instead of simply voting for our favorites—usually done by sticking a colored dot on them—we sometimes focus our attention on the bite-sized chunks. For example, the project leader will say “Put a dot on the ideas you could explore within the next two hours’ or ‘Tick ideas that you could prototype by the end of the week.” We constrain our options by looking at how we can make progress right now.

If you show up at a meeting with an interesting prototype while others bring only a laptop or a yellow pad, don’t be surprised if the whole meeting is centered on your ideas.

Here are the Toy Lab’s seven tips on how to make a video prototype sing:
  - WORK FROM A SCRIPT. Don’t try to wing it, memorable sound bites stick because you’ve carefully chosen those words. A well-edited script will save time in the end and ensure you cover all of your important story elements.
• USE VOICEOVERS AS A SHORTCUT. For a fast paced video, a voiceover is the quickest way to convey meaning or “back-story.” Voiceovers also streamline editing because it’s often easier to add video footage to spoken audio than vice versa.

• GET ORGANIZED WITH A SHOT LIST. Think through each shot you want in your video: close-ups, wide shots, still images, and so forth. Make a list and cross them off during your shoot to make sure you don’t miss any.

• PAY ATTENTION TO LIGHTING AND SOUND. If you have anything beyond a shoestring budget, decent lighting and a remote microphone are worthwhile investments. Both will help distinguish your final cut from the average home video.

• BE MINDFUL OF VISUAL RHYTHM AND PACING. A mix of camera angles and styles helps keep the video moving. Don’t stay too long in one camera position; a single take can get stale after a few seconds (unless what’s happening is really important for the viewer to follow).

• GET EARLY FEEDBACK. Show rough edits to people new to the content. See what they notice and where they get lost. Have them point out when they get confused. Look for big-picture feedback—is your message getting across? Check by asking them to summarize the video in one sentence.

• SHORTER IS BETTER! Think of your video as an elevator pitch rather than a documentary. Most Super Bowl spots are only thirty seconds each. If your video is longer than two minutes, you risk losing an impatient audience. If you are struggling to find a place to cut, try watching the video ten times in a row.

**Here are some hints for storyboarding your new concept:**

• Focus your attention by picking a specific scenario to prototype or an experience to map out.

• Capture each key moment with a quick sketch and caption. We often use individual Post-it notes or sheets of paper for each frame of the storyboard. Separate sheets make it easier to rearrange the order or to add and delete steps. Try not to spend more than half an hour on your storyboard.

• Once you have a first-draft storyboard, write three questions it raises about your idea. List any new issues that emerged. Identify elements of the experience that are still unresolved.

• Find someone to walk through your storyboard with. Watch closely for nonverbal reactions and listen carefully to their responses. Use the feedback to refine your service idea—and your storytelling.

• One of the “secret ingredients” in a culture of experimentation is getting your team to defer judgment long enough to let an idea evolve.

• “Creating Infectious Action” was a high-energy d.school class that challenged students to make an idea go viral—or to literally start a movement. Although that may sound intimidating, with some coaching and a few design thinking tools, students were able to prototype everything from grassroots marketing campaigns to entire business.

• In most organizations, such a unilateral shift would have encountered fierce resistance as, one by one; executives requested a private meeting to voice their objections. But Jim is a natural leader, and that’s not what he did. Instead, he proposed an experiment. He suggested that—for six months—everyone on the team try moving out into an open-air Leadership Community, equipped with the latest office furniture and technology. “I don’t want any foot dragging,”
Chapter 5: seek, from duty to passion

- Back when Tom was a management consultant, he once lamented to a friend who was a social worker how sad it was that his profession got paid so much, while her profession got paid so little. Without a moment’s hesitation, she said, “That’s 5 because you have to pay people a lot to do management-consulting-type work, but I’d do the social work for free if I could afford to.” For her, the heart outweighed the dollar.

- They think of it as either a job or a career or calling. And the difference is crucial. When work is strictly a job, it may effectively pay the bills, but you’re living mostly for the weekend and your hobbies.

- Our point? What matters most about your career or position is not the value that others put on it. It’s how you view your job. It’s about your dream, your passion, your calling.

- Each two-hour class is filled with a fast-paced succession of hands-on exercises that hone foundational skills for creativity: seeing, feeling, starting, communicating, building, and connecting. Navigating, synthesizing, and inspiring. Activities range from the playful and the seemingly silly (such as making a piece of wearable jewelry out of tape in just sixty seconds) to the extremely challenging (such as expressing a moment of disgust using only squares, circles, and triangles). The goal of the class is to get students more attuned to their intuition and to heighten their awareness of their surroundings.

- One way to begin accessing this inner reserve is to jot down moments in your life when you feel really alive. What were you doing and who were you with? What about it do you love? How can you re-create key elements in other situations?

- The three circles represented three questions you should ask yourself: “What are you good at?” “What will people pay you to do?” and “What were you born to do?” If you focus on just what you’re good at.

- To find those things that create a sense of flow, Jim Collin use his own unique form of self-analysis.

- At the end of each day, he’d write down not just what happened, but what made him feel the best about himself during the day.

- Every evening before bedtime, he would reflect briefly on the ups and downs of his waking hours. He would then score the day in terms of how much fun he had, on a scale Tom one to ten, and mark it on his calendar. After collecting a couple weeks worth of data he went back and reflected over his calendar together with Barr to find what activities drove the number up or down. They discovered some surprising patterns. Days in which David had a solitary hour or two in his studio space—a rustic loft over a barn—were more rewarding, happier days. And his score bumped up even higher when he blasted his favorite music while making something in the studio—whether it was a metal bracelet, a custom piece of wooden furniture, or a papier-mâché Halloween costume. He identified which activities—work related and otherwise—gave him the greatest sense of satisfaction and accomplishment. He also noticed which ones dragged him down. And then he began gravitating toward those activities that raised his scores and away from things that lowered them. It was a very simple process. But it led David to moments of epiphany and behavior change—articulating new insights he had been previously discovered about himself.

- So try identifying the things that bring you happiness and fulfillment. Look for ways to incorporate more of those things in your life, whether it’s helping others, getting more exercise,
reading more books, going to a live concert, or taking a cooking class. A designer at IDEO used to place stickers in her appointment book to note moments when she was happy, anxious, or sad. The modern-day equivalent can be easily found with mood-mapping apps that allow you to keep track of your daily ups and downs, so you know what you want to do more of—and what you want to do your best to avoid. This “mood meter” can help you think about both your work and your personal life. You don’t necessarily have to do anything elaborate to gain some new insight into yourself.

Chapter 6: team, creative confidence groups

- Emerging from an executive offsite in 2007, D4D had the support of a lot of senior management. But Kaaren quickly learned that while buy-in from the top is necessary, it is not enough to guarantee success. The company got mired in what Kaaren calls “the talking phase,” in which lots of people vocally express their support but no actual action is taken or progress made. “We made that mistake … twice,” she says, referring to a second offsite over a year later. Key executives all agreed that Design for Delight was important to the future of the company and wanted to incorporate it in their groups. Yet D4D still remained more of a vision than a reality.

- So in August of 2008, Kaaren recruited nine of the best design thinkers in the company to join her in a group called the Innovation Catalysts to spark creative initiatives and serve as coaches to help managers turn D4D ideas into action. The Catalysts came from design, research, and product management and were in positions close to the day-to-day operations of the company.

- She gained access to about 10 percent of each of the other Catalysts’ time (two days a month) and probably a much larger percentage of their mind share. They went in search of opportunities to delight customers and spur innovative practices across the organization.

- How did Kaaren and her colleagues build a creatively confident group, driven by new ideas? They got at least half a dozen things right:
  - They gained broad executive support, which helped the Catalyst program cut across organizational lines.
  - They launched grassroots action that required only modest middle-management commitment by using small percentages of employees’ time.
  - They leveraged one of the core principles of the company—simplicity—and gave it new life with the tangible concept of ‘Design for Delight.”
  - They handpicked the first few Catalysts to help jumpstart the program, knowing that it could be scaled up later, once the group had some momentum.
  - They avoided big complex products owned by other departments and divisions within the company and instead launched small experiments in search of some early wins in new markets.
  - They set a multiyear time horizon, recognizing that real culture change diffuses slowly through a large organization.

- After witnessing the evolution of innovation and design thinking for a decade at 3M, Mauro believes that companies progress through five phases for as they gain creative confidence.

- Mauro calls the second phase “hidden rejection.” This is where one executive strongly recommends and sponsors a new innovation methodology, and the other managers pay it lip service but then never actually commit to it.
Albert Bandura’s research on self-efficacy. Senior executives telling managers to boost innovation can have a limited effect. The most robust method to boost creative confidence is through guided mastery. Like learning how to drive a golf ball up the middle of the fairway, the most effective way of learning how to innovate routinely is through practice and coaching.

S. Innovation leader Claudia Kotchka helped introduce design thinking at Procter & Gamble.

Many clients have mentioned the importance of having trained innovation coaches within the company who can guide others toward creative confidence. While Intuit has its “Innovation Catalysts,” other companies have their own versions, with names that range from “facilitators” to “coconspirators.”

To start building a culture of innovation, you need support from both the top and the bottom—what Jeremy Utley at the d.school describes as “ground troops and air coverage.”

Karaoke confidence in your work culture. How do you make it safe to participate and engage in creative action? How do you gather the courage to try something new?

So why is developing our creative confidence at work so fraught with peril? Why are we so prone to abandon a creative endeavor just because it’s difficult early on?

Karaoke confidence seems to rely on a few key ingredients. And we’ve noticed that those same ingredients are essential for encouraging cultures of innovation everywhere. Here are five guidelines that can improve your next karaoke experience—and your innovation culture:

- Keep your sense of humor
- Build on the energy of others
- Minimize hierarchy
- Value team camaraderie and trust
- Defer judgment—at least temporarily

At IDEO and the d.school, we seldom say, “That’s a bad idea” or “That won’t work” or “We’ve tried that before.” When we disagree with someone else’s idea, we push ourselves to ask, “What would make it better? What can I add to make it a great idea or, “What new idea does that spur?” By doing so, we keep the creative momentum going instead of cutting off the flow of ideas. Throwing cold water on one person’s contribution can bring the conversation to a halt; it is the back and forth of ideas that can lead you to new and unexpected places.

Care and feeding of an innovation team

- Working with people from diverse backgrounds is valuable, but that doesn’t mean it’s easy. It can lead to “creative abrasion.” But as you work through conflicting opinions and points of view, new ideas can emerge. To maximize the creativity of your team, keep in mind the principles that resident “d.shrink” Julian Gorodsky and former student Peter Rubin developed at the d.school to help team members be more supportive, honest, empathic, open, and comfortable enough with each other to encourage creative ideas.

1. **Know each other’s strengths.** Imagine your team as a band of superheroes, each with his or her own special ability and weaknesses (or kryptonite). Divide the work to maximize team effectiveness and draw on each person’s strengths.

2. **Leverage diversity.** The dynamic tension between different viewpoints is what makes diverse teams a fertile ground for creativity. It can also be a source of conflict and miscommunication. Teams that truly value diversity are willing to have the risky conversations rather than shy away from them.
3. GET PERSONAL. Leaving your personal life out of your professional life takes a toll on creative thought. Bring your whole self to work. Kick off team meetings by going around one by one with: “How are you doing, really?” check-in or a simple “Share something personal about yourself.” Each person on your team brings unique life experiences to the table.

4. PUT THE “RELATIONSHIP” BACK IN “WORKING RELATIONSHIP.” When we ask d.school teams what will matter most when they look back five years from now, the answer is usually “my relationship with my teammates,” not just the project outcome. Keep things in perspective.

5. CRAFT YOUR TEAM EXPERIENCE IN ADVANCE. How will you help each other in the days ahead? What principles do you want to abide by? What do you hope to achieve—both personally and professionally—with the project?

6. HAVE FUN! Make it a priority to hang out and get to know each other. Having fun together will improve your collaboration. Go on a hike, get dinner, play a game, or work out as a team.

- Our version of the alternative to negative speech patterns is the phrase “How might we . . . ,” introduced to us several years ago by Charles Warren, now salesforce.com VP.

- Innovation leadership
  - The various ways of creating a culture of innovation that we’ve talked about so far are greatly influenced by the leaders at the top. Leaders can’t dictate culture, but they can nurture it. They can generate the right conditions for creativity and innovation.

- Multiply the impact of your team: Liz suggests that leaders who are multipliers can double the output of a team or company and improve morale in the process. Here’s how you can become a multiplier:
  - Be a “talent magnet” that attracts and retains the best, most creative people and helps them reach their highest potential.
  - Find a worthy challenge or mission that motivates people to stretch their thinking.
  - Encourage spirited debate that allows different views to be expressed and considered.
  - Give team members ownership of results and in vest in their success.

- Great groups believe they are on a mission from God. Beyond mere financial success, they genuinely believe they will make the world

- A better place. Great groups are more optimistic than realistic. They believe they can do what no one else has done before. “And the optimists, even when their good cheer is unwarranted, accomplish more,” says Warren.

- Great group’s ship. “They are places of action, not think tanks or retreat centers devoted solely to the generation of ideas.” Warren characterized the successful collaborations he studied as “dreams with deadlines.”

- Right mix of patience, perseverance, and force of personality to spread creative confidence across a huge corporation.

- But she was willing to try. She sent out a note to P&G business leaders and asked for their toughest problems, offering to help solve them. Her inbox was inundated. She then created an innovation fund to send a group of buttoned-down P&G executives to IDEO to work side by side with designers on some of those thorny problems.
• Claudia later brought in innovation practitioners to conduct workshops at P&G. Eventually employees were trained as facilitators of the process so they could lead the workshops themselves. In one workshop, the Olay team wrestled with the problem that consumers had trouble distinguishing the different products in the Olay line. The team had planned to redesign the packaging. But they scrapped that solution after they realized through the workshop that by that time the consumer got to the store shelves, it was too late—if they didn’t already know what they were looking for, they weren’t going to figure it out in the store. So the team instead reframed the question, which guided them toward building a website called “Olay for You.” It helped consumers figure out that product they should use and gave them personalized recommendations before they went to that store.

• What did the workshops look like? In a whirlwind three days employees were guided through applying the process of brainstorming, researching end users, building prototypes, and fleshing out concepts to a problem they were struggling with.

• High level executives often arrived at these workshops expecting to start with a PowerPoint presentation. “And step one; we throw them in with consumers. They are freaking out. They want to see an agenda, and we’re like, nope, sorry,” says Claudia. “The workshop moves so fast they don’t have time to question the process. They are immediately engaged.” One of P&G’s vice chairs told Claudia it was the best training he had ever had, both because it didn’t feel like training and because he was solving a real problem that was important to his group. “Every single one of those workshops was a hit because they would come away with insights they never expected,” says Claudia. A.G. Lafley even came to Claudia with a problem—how can we get the business units to work together instead of being siloed in their own profit centers? With permission to experiment, Claudia and P&G figured out a number of things during this time of organizational change:
  
  o **TESTIMONIALS—NOT JUST METRICS AND RESULTS ARE PERSUASIVE.** Stories and votes of confidence from those who had experienced the new innovation methodology were key in convincing others of its value. “People had to believe that the workshops were worth their time or they wouldn’t do them,” Claudia says.
  
  o **PROTOTYPING IS BOTH A POWERFUL INNOVATION TOOL AND A POWERFUL CULTURAL VALUE.** “Everything is a prototype,” says Claudia. “So, we would do an org change and I would say to everyone, ‘It’s a prototype. ‘Which means (a) I have permission to be wrong and (b) I want your feedback if it’s not working.” Ideas were no longer sacred. If your idea was dismissed, you didn’t feel bad or feel as if your idea had gotten killed. “That’s magic. It’s so huge. Because when people get locked into something, it’s hard to get them off of it, and then their feelings are hurt,” says Claudia.
  
  o **TRAINING ALL THE DISCIPLINES HELPS DISSEMINATE CHANGE.** Training people from all disciplines helped instill creative confidence organization-wide: purchasing, supply chain, market research, marketing, R&D—even finance. “Finance people are amazingly creative,” says Claudia. “The workshops were the first time they talked to consumers, and they loved it. And you know what they would say? I’m bringing my whole self to the job.” As result, there were facilitators throughout the organization: “HR would be sitting around saying, ‘What are we going to do about the retention of women?’” says Claudia. “And the facilitator would say, ‘I can help us fix that;
• Claudia helped bring creative confidence to P&G by getting as many people as possible to experience small successes for themselves. Today, P&G has three hundred facilitators throughout the company who continue to train employees in how to embed innovation thinking in every aspect of the organization.

• As A.G. said of Claudia upon her retirement from P&G, “Under Claudia’s leadership, in only seven years, we’ve built world-class design capability at P&G. She has helped integrate design and design thinking into how we innovate and how we operate as a company. Her passion for the power of design has strengthened our brands and our business.”

• Frank Gehry is one of the greatest living architects, famous for designing iconic buildings like the Guggenheim Museum in Bilbao, Spain, with its dramatic sheathing of wavy titanium. Early in his career, he had a job washing airplanes in a small airport in Southern California. Frank says he liked that simple job, and if someone had just taught him to fly he might have stayed there. Imagine that. The manager of that little aviation company had one of the most creative architects of the past hundred years washing planes for him. But neither the manager nor his employee knew how much potential energy stood out on the tarmac, just waiting to be unleashed. Is there a creative genius doing spreadsheets in your accounting department? Is there a future Fortune 500 CEO in your sales team? Is there an employee just waiting for the right opportunity or partner to unlock billions of dollars of value for your organization?

Chapter 7: creative confidence to go.

**Refer to picture attachments**

Chapter 8: next, embrace creative confidence

• Normalcy is overrated!

• SEARCH FOR THE BIG EASY. Tough, daunting challenges tend to deter rather than spark creative action. So start with an easy win, or break down that bigger challenge into more manageable chunks

• Be remarkable about the extracurricular. Sponsored to do extracurricular things, and do them in an extraordinary way. David’s former students, now out in the business world, say they’ve use this approach to thrive in the new organizations. For example, sign up to organize the annual company party or the next management off-site. Start an innovation book club. Post a lunchtime lecture series with visiting experts. Make them remarkable experience, and everyone will notice. Succeed at a few such visible things, before long you become known as the go to guy for creative thinking.