Keynote Speech for “Failing Successfully” Summit
Kelley School of Business, Indiana University
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I feel very privileged to be here to talk with you about something that’s important to me and to many of us. I especially want to thank Emma Mitchiner and Emma Lullo for inviting me and for creating this event, and I hope you dig into this stuff later today and in the days to come. I’ll mention the work of several people, and I have a list of references that I can share later if you’re interested. I’m also happy to hear from you via email.

I’ll tell you a little about myself and how I got here.

I was an excellent student as a young kid. I had high standards and was used to just about perfect grades. I liked it that way, and I assumed that my great grades were just something that would happen forever. But, as I began to take classes that I couldn’t ace without studying—algebra in middle school, Latin in high school--as I began to have to really study, I felt disconcerted by almost every problem that I couldn’t immediately solve. Now, I had to work harder, but I didn’t know how to do that effectively, and I didn’t really know that I didn’t know. I began to wonder what was wrong. But I had no idea. My life was kind of going along on the surface, but whenever I thought about my schoolwork, I felt ashamed, mortified. So, what did I do? I did what I intuitively felt would bring me less pain: I found myself avoiding studying. I developed a pattern: I would start school in the fall and do some excellent work, but then in the spring, I found it harder and harder to get myself to get up and go to school, and sometimes I just couldn’t bear to go. To make an incredibly complex and painful situation very short, my attendance was intermittent enough that—to my horror--the school arranged for me to see a therapist. She turned out to be a respectful, patient, skilled person and, with her help, I eventually realized that I was afraid—worried that I wasn’t doing what I was supposed to do—especially that I was letting my parents down.

My, father, a wonderful, devoted parent, had wanted to go to med school but hadn’t had the financial support from his working class parents, who hadn’t gone to college themselves and didn’t understand why he wanted to, and there weren’t scholarships then. My mother, a tender, intense person who’d been a star student in high school, and was also from a low-income family—Finnish immigrants in Upper Michigan--had had to drop out of high school to go to work after her father died suddenly. Gradually, in my discussions with my therapist, I began to be more aware of my experience. I began to realize that I was trying to make up for what my parents hadn’t had and do justice to their care and support for me. I didn’t know it at the time, but I was beginning to re-fashion my relationship to my own work.

When I was 18, I re-entered school at the college level, gradually revising my relationship to my academic performance so that it didn’t define me. I asked myself what interested me and, as much as I could, I chose courses and wrote papers based on that, and I didn’t do perfectly, but I did well enough to eventually get into a master’s program at the University of California and then a doctoral program at Harvard. By the way, I never did graduate from high school.

It's hard to describe how awful those early struggles were, and I wouldn't wish them on anyone, including myself. At the same time, I don't think I would have had the insights and opportunities and satisfactions I've had without some of the things I learned during that time.

I work at a place at Harvard called the Bureau of Study Counsel. It was founded by William G. Perry Jr., about 70 years ago, and ever since it's been a place where students and others can come to talk, reflect, and explore what they find meaningful—what they care about--whether it's an upcoming exam, how to read tons of material effectively, a relationship, or their worries and hopes about the future. I've been doing this for more than 20 years now.

Several years ago, my colleagues and I became concerned about what we thought was an increase in the number of students we knew who were trying to protect their GPAs by taking easier classes, even when there were other classes that seemed more interesting to them, or they were writing papers that were safe but contained no real questions of their own-- they were trying to find a smooth, failure-free way to navigate college and life. Even when they knew they were doing this, they did it. It seemed to us that they were kind of stuck in this plodding way of going through school, and they sometimes said they weren't feeling much deep satisfaction--and didn't expect to. I realized that many of them were trying to figure this out all by themselves, and I became interested in creating ways for these students and others to reflect and to talk more publicly about this—about how they define "success"—how they decide what's a good life, and what they mean when they use the term, "failure."

The Success-Failure Project grew out of that and now offers events like panel discussions and other things, and its website has material like videos of students and faculty talking about all of this, including their own rejections and their reflections on what those words, "success" and "failure" mean to them.

So, some of you may have recognized yourself in some parts of *my* story, but I also want to share with you some of the ways my current students talk about this. They have high standards early in school, and it pays off. They work hard in high school, and they don't get stuck where I did. They get great grades and then get into a highly selective college. But, although it seems even more important to get perfect grades at this point, they somehow get something less than perfect-- let's say, a C. Then they're rejected from an internship they really want. They later tell me that other students don't seem to be struggling the way they are. Maybe, they think, those students are just smarter. "Maybe I don't really belong here." "Maybe I'm just lazy, or maybe their character is somehow stronger than mine." Or, the worst nightmare for some of them, "Maybe I'm mediocre." Then, instead of plugging in and working or asking about new ways to work, they find themselves procrastinating on assignments. There are emails to send, there's Facebook and YouTube, and a friend needs support with relationship issues. Doing laundry really begins to seem quite appealing. They get more and more paralyzed. They figure maybe they're not motivated enough and try to fix it by being harsher with themselves--telling themselves they absolutely *have* to get it together, that their future depends on it, their family will be disappointed if they don't do well. But those threats don't seem to lead to better work.

These students mostly manage to get assignments in, but it tends to be last minute-- after an all-nighter--and they often don't think the products are as good as they could be or should be. These students are really stressed, and they are more and more irritable, tense, and worried. It feels like a vortex. To make matters even worse, as they see it, they have to present a smooth image, so they don't mention to anyone what they're going through. What could anyone else do, anyway? This is the point at which I sometimes begin working with students.

My words today are for anyone who has ever felt shame about a grade or an evaluation, who has said to themselves, "I'm not smart enough," "My family will be disappointed..." "My instructor believes in me, so I can't let them down," "I won't be able to have the life I want because of this," "This failure means *I'm* a failure." This failure means I'm a *loser*." This is for all of us.

Okay, so maybe you already know this stuff, at least intellectually-- that failures are inevitable and natural. You might even have parents, friends, or teachers who say mistakes and failures are fine.

So, why feel so bad about it? I think there are good reasons why we care about failure. It's kind of the other F-word.

I think there's a lot going on here. As they explore their own lives and their relationship to their work, some of my students say things like, "It's fine for my friends to fail at something. But if I fail, that's different. I blame myself and say there's no excuse." So, for some of us, other people are in a different category. *We* aren't allowed to fail, even if others are. My students also point out that GPA is a reality. It can actually affect opportunities like admission to grad school and jobs. And in some situations there's the need to learn a skill in order to become a competent professional, like maybe in medicine... or business school. So, there are some good reasons why we might want to avoid mistakes and failure.

And listen to this: The word "Fail" is from the old French "to be lacking, come to an end; make a mistake; be dying; to let down, disappoint." Yikes. No wonder we run the other way! And yet failure is inevitable. What a dilemma!

But is it always like this? Not really. Sometimes we relate differently to our failures. Let's say we want to try something new, like learning to throw a Frisbee so that it flies way down the field. We want to be really good at it, maybe get on an Ultimate team. We pick it up, swing, release, and the Frisbee flies a few feet, tips sideways, and rolls along the ground, which is what happens to most people on the first try. Okay, so we might experience that as somewhat negative—it didn't do what we were trying to do. It's natural to be disappointed or frustrated. But still, many of us wouldn't be so affected that we would never want to throw another Frisbee. And what about gaming? You try a new video game and get "game over" again and again. And what about babies learning to walk? What if they said to themselves, "Oh no! You'll never walk now! What a loser!" Or with gaming: "What? Game over?!! Now I'll never be any good at video games!" But, most of us accept some kinds of learning as *processes*. We don't

feel awful about all of our failures. We don't say we're bad, we *are* a failure. Why is that? Why are we better able to tolerate a gradual process of learning in some situations than in others?"

I think one answer has to do with what we make of these events. As one of my mentors, Kiyo Morimoto, said we are "meaning making" organisms. And sometimes we make complex and not helpful meanings, even with the best intentions. We aren't like a Roomba—we don't just bump into things and, without any moral judgment, simply pivot. Instead, we think about our mistakes and failures and make complicated inferences about them.

I often invite students to take a moment to reflect on what they think and how they feel when they realize they've made a mistake. They report saying things to themselves like, "You should have known how not to do that," or "That was a stupid mistake." "There's no excuse." I then ask them how that feels inside—what their emotional reactions are to that kind of moment—to that kind of internal criticism. They might think about it and say, "Well...I feel bad, I guess... I feel kind of ashamed." So, we have a thought, and then we have an emotional reaction to that thought. And some people go on to say, "But I know I shouldn't feel that way; I should be able to be resilient, I should just get up and go on." They say that if they were to consider anything about the context of their failure—for example, that maybe they have less background in a subject than other students—that would just be an excuse for them to be lazy. Their inner critic just won't cut them a break. Kiyo Morimoto used to say that we're the only species that has thoughts, and then emotional reactions to our thoughts, and then thoughts about our emotional reactions, and so on...This all happens is a few seconds. So we create very complicated moments, very complicated narratives, in a hurry.

Most of us have a version of a narrative in our heads about our failures. Sometimes it goes something like this: "My product, let's say a paper or exam, equals some fixed quality of mine, like intelligence or aptitude. That, in turn, determines or is equal to what my professor thinks of me, which determines and is equal to my grade, which is equal to what they think is my potential in life, which equals how good I really am, and also their willingness to support my future opportunities, and that determines my whole future (and many of us have some vision of the worst future we can imagine—working at a doughnut shop, living at home forever, being alone, whatever it is). So, if this paper or exam or whatever doesn't demonstrate my full potential, I'll end up living alone and stocking shelves at a big box store. So every product has a heavy load to bear. No wonder we can get worried about it. These narratives can be very scary.

But maybe you're thinking, what's wrong with aiming for perfection?

I know that some people aim for perfection because it means having *high* standards as opposed to having *low* standards. So, for them, any shift in their way of thinking about this makes them worry that they are lowering their standards—being "lazy," copping out. But having high standards is different from accepting only results that are perfect—results that deny the complexity of the context. Instead of doing that, we can aim high, think more complexly and realistically, and recognize more of the actual context and the process, which can include mistakes that are necessary and potentially valuable, even if they kind of suck in the moment.

I'd like to tell you about the Yerkes-Dodson Law. This idea was first expressed in the early 20th century and has since been tested using galvanic skin response and other methods. The main idea is that, when a task is easy, we can be quite anxious and still do it well. But, as the task gets harder, we have to be less anxious to perform optimally. It's important to be engaged and to care about a task--not to be indifferent--but it's also important not to care so much that we're freaked out. So there's an optimal level. So, getting very stressed over failures-- making those dire interpretations, catastrophizing, predicting a bad life, etc., creates meanings that generate strong, negative emotional reactions. They take attention and energy. It turns out that we're more innovative, more likely to work creatively and effectively on complex problems, not to mention we're happier, when we can keep our anxiety at a lower level—we can make mistakes and not challenge our entire moral character or our intelligence or our future happiness.

So, let's say we accept that failure is inevitable, and that it would be better to relate to it more constructively. How do we do that?

One powerful thing we can do is reframe the meaning it has for us.

Carol Dweck of Stanford is a leading researcher on how we can change our relationship to our work. Her research shows that, when we think our performance is a reflection of what she calls a "fixed mindset"-- qualities that we think we can't change, like intelligence or absolute aptitude, we are more stressed about our products, like papers or exams—we're more likely to worry about our performance and what it shows about us. On the other hand, when we think our performance is a reflection of what she calls a "growth mindset"—qualities that we believe we can change, we are less stressed and more likely to try new things, to be more open to learning. We're less identified with every single product. So, thinking that each paper or product is a reflection of something permanent about us makes us more likely to freak out about it. It can lead us away from creativity and innovation toward risk-avoidance—staying within the existing parameters, not trying anything new, not doing that thing people so want to do—having game-changing ideas.

So, put simply, it's helpful for creative thought, for truly innovative thought, when we interpret a failure less broadly—and when we allow the potential learning that is there to emerge.

You might be wondering, What does this look like in real life?

Atul Gawande, a surgeon, researcher, and writer, is known for groundbreaking work that carefully examines systemic mistakes in hospitals. He advocates building in methods of learning from those mistakes.

How about in business?

There are many people looking at how our aversion to learning from mistakes impacts the business world. Dweck quotes another researcher, Sidney Finkelstein, who found that "the

higher people are in the management hierarchy, the more they tend to supplement their perfectionism with blanket excuses, with CEOs usually being the worst of all. This is in spite of the fact that a study by IBM of more than 1,500 executives across 15 countries found that almost 60% failed on at least one major objective or failed entirely." Dweck's website notes that, "When bosses become controlling and abusive, they put everyone into a fixed mindset. This means that instead of learning, growing, and moving the company forward, everyone starts worrying about being judged. It starts with the bosses' worry about being judged, but it winds up being everybody's fear about being judged. It's hard for courage and innovation to survive a company-wide fixed mindset."

Many business strategies are guided by the aim of measuring the distance to goalposts—goalposts that are chosen for their ability to create rapid, failure-free results, rather than goalposts that represent more significant challenges.

Peter Thiel, a cofounder of Paypal, put it this way: "In the late 1990s, venture portfolios began to reflect a different sort of future...venture investing shifted away from funding transformational companies and toward companies that solved incremental problems or even fake problems (e.g., having Kozmo.com messenger Kit-Kats to the office)."

Amy Edmondson of the Harvard Business School studied a spectacular and tragic failure, the *Columbia* space shuttle disaster in 2003. She found that "A rigid hierarchy and schedule-obsessed culture at NASA made it especially difficult for engineers to speak up about anything but the most rock-solid concerns...More often than we realize, complex systems are at work behind organizational failures, and their lessons and improvement opportunities are lost when conversation is stifled."

She says, "Savvy managers understand the risks of unbridled toughness. They know that their ability to find out about and help resolve problems depends on their ability to learn about them." So, business contexts are ripe for rethinking failure! This is big stuff. Delving into failures can produce valuable data. Don't miss the information that's there!

You may have come across the idea of "design thinking." It relies on the assumption that excellent design involves iterative efforts that may include many failures and discoveries of faulty assumptions. Tim Brown, President and CEO of the design firm IDEO, says that design thinking "Means creating a safe environment in which everyone from interns to managers to VP's can fail without fear."

Edmondson and her colleagues came up with a nice framework for thinking about failures.

She says there are three types of failure:

> 1. Preventable failures in predictable operations. When you have all the information you need in a fairly standard situation.

2. Unavoidable failures in complex systems. For example, there's a particular combination of needs, people, and problems that makes the whole situation very complicated. Some elements are unknowable at the outset, and failure is almost certain. For instance, hospitals can have many small failures that accumulate.

3. Intelligent failures at the frontier. This is where there are new situations, maybe new technologies, so there's lots of inherent uncertainty. Failure is inevitable, and good, in a way.

A few years ago, some colleagues and I presented a workshop on failure at a conference put on by an organization called VentureWell, which supports business ventures that have a social benefit. We explained these three types of failures and then asked participants to think of a failure they had been involved in and identify which type it was. We then asked them to describe those failures in more detail. We were surprised to find that many of them mistakenly thought their failures were the first type—failures they should have been able to avoid, when actually most were the other two—they involved complex situations or failure at a frontier. Without intending to, they had already begun the process of making it harder to examine and learn from their failures. They had set the stage for feeling guilty or ashamed. So, we may tend to think our failures are more blameworthy than they really are and miss opportunities to learn what actually happened—to be curious.

This is not to gloss over failure or pretend everything is fine, but to extract what learning we can from it without the distraction of severe self-criticism. As my mentor Bill Perry used to say, "When smart people do seemingly foolish things, there are powerful forces at work." We can be curious about those forces.

We can ask, Am I dealing with a situation in which the information I need is clear and available, or am I dealing with a complex context? Or with new ideas at some kind of frontier?

I want to mention that there are some important differences in all this between high school and college and between both of them and the professional world. High school has more assignments that have known answers in relatively simple contexts. Your job is often to find them. Like in a chem lab. But in college, you may get more assignments that are based on real world complexity and may not even have known answers. Beyond college, much of your future work will involve complex contexts and ambiguous, possibly emerging elements—things you can't realistically know until you're in the middle of it. So, lots of complexity and uncertainty, and failure will be increasingly likely.

You'll probably be employees and leaders someday of business organizations, and maybe you already are. In those roles, you can work to create systems that acknowledge the reality of valuable failures, of working in complex systems or at a frontier. You can ask colleagues what would help them to do this. And they can help create genuine learning systems.

You can work to create an environment that de-emphasizes the careful crafting of what Edmondson calls "excellent pilot products that assume best conditions." Instead, you can encourage the creation of pilot products that attempt to mimic the worst conditions in which they will be used, making lots of mistakes but creating more and better learning.

You can think about your own definition of "success"—for you, what big problems are worth solving? What might bring you genuine satisfaction in the long term of your life? And that may change over time.

The reality of our world in this age is that many problems are complex, change happens fast, and definitions of "success" and "failure" have to be revised to acknowledge that reality. This is increasingly important as technology and geopolitical change bring new complexities. As Tal Ben Shahar points out in The Pursuit of Perfect, it's valuable to get good at *not knowing,* at failing again and again, and at reaping the lessons, the data, that are integral to those failures.

What might this look like for you as a student? Here are some ideas, and maybe you'll think of more later today that are specific to you.

1. You might develop a practice of noticing your thoughts and feelings when you don't have an answer, or when you make a mistake—what is your inner narrative like? Maybe you're thinking about it even now. I suggest you allow yourself to feel the pain, the disappointment. It is sometimes very hard to bear, but it's real, and allowing it its due can take time. Sometimes there's no silver lining, and it just feels bad. As you notice all that, it will probably begin to change. Note that this is different from predicting catastrophe, engaging in self-punishment, or assigning yourself a destructive label.

2. You might also do some thought experiments. For example, in one scenario, you take an easier class and get a fine grade; in the other, you take a harder one that's more interesting and try something new, learn something, and get a lower grade. How do you understand that? How do you feel? Are your concerns based in reality?

3. You can check your assumptions. You can try to get more information about what and how well you have to do for your own purposes.

4. You can arrange discussions about this with each other and with faculty. For example, you might ask faculty members if there are ways they can evaluate you that reward good failures.

I'll give you an example of how this can look for my students.

I try to stay present to their experience as they explore these things. As I mentioned, I might ask how it feels inside when they blame and threaten themselves. They sometimes respond, hesitantly, "Well... It feels bad... It's painful." They often realize that they are exhausted much of the time. They begin to notice more and more the way they think and process things, their inner experiences, images, or inner dialogue--that it contains a lot of self-criticism, sometimes

even self-condemnation. They begin to see that as crippling, rather than helpful, even if it is well intended, and even if they think it was helpful in the past. They might begin to experiment with their internal narrative—developing alternative ones: “Maybe this failure doesn’t mean *I'm* a failure.” “Maybe this paper isn’t all it could be in an ideal world, but it’s a work in progress...” “I’m going to try this and see what happens...” They gather information—maybe they talk with advisors about the actual meaning of their GPA for their future. They might also experiment with their trajectory a bit—they take a course that seems interesting, even though it represents some risk to their GPA, or even a possible change in their long-term plan. They might ask for permission to do a class project that involves tackling a complicated, interesting problem but is a little off the beaten track. They’re not out of the woods yet; it’s still scary to allow themselves to turn in something that they think isn’t perfect, and they still hear the harsh voice of their inner critic sometimes, but they feel there is more to them than the product they’re working on right now, and that they have more options than before, even if their current work may not show their full potential. They try sharing some of their struggles with a few friends and feel mostly okay about it and less alone. They feel lighter and more hopeful about their future.

Some people think that avoiding failure at all costs and accepting only perfection leads to better performance. But it actually gets in the way of curiosity, sustained excellence, and innovation, and it saps joy. Failures are a condition of being human and a condition of positive change. In fact, they’re the basis of a great deal of innovation—examples are everywhere--and, if you think about it, that’s a big part of evolutionary change. That’s how we humans got here.

Of course, there’s not just one way to deal with failure. I leave it to you to reflect, discuss, and try some of these ideas out as you see fit. Make them your own in whatever ways are useful to you. As you do that, I wish for you that you find ways to be yourself, both as a student and a leader, because that is how you will be most innovative and also feel most whole and alive. I wish that for you, but I also wish it for our world--that we all take on big challenges and help others to do the same by recognizing that there are important, hard problems to solve, reasons to try, excellent ways to fail and to learn from it – reasons to be humanly, perfectly imperfect.

Ariel Phillips

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