



## Stanford eCorner

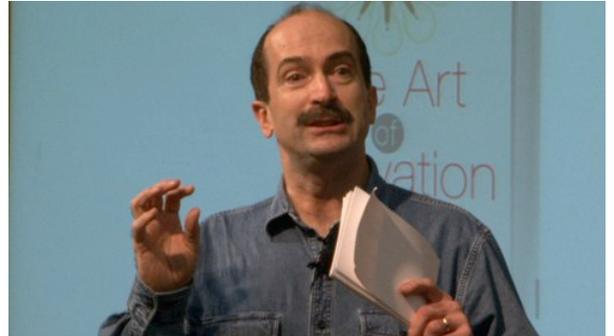
### Treat Life As an Experiment

Tom Kelley, *IDEO*

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Video URL: <http://ecorner.stanford.edu/videos/2101/Treat-Life-As-an-Experiment>

Sometimes it works out, and sometimes it doesn't. Just ask Thomas Edison, the makers of WD-40, and vacuum guru James Dyson - who collectively tested thousands of ideas before finding a handful that stuck. But the point behind the practice of experimentation in innovative thinking, says IDEO General Manager Tom Kelley. Take risks frequently, and be prepared in case the resulting action fails to meet your expectations. Fail forward, and there will be learning from your mistakes along the way.



#### Transcript

The second one is called "treat life as an experiment". And this is partly about risk. This is partly about actually being willing to fail because experiments, as I said earlier, they're not all successes; that's why they call them experiments. And so if you treat life like an experiment, you got to be prepared for some stuff not to work out. You know I'm an author and I take this approach with books, too, because you go to a bookstore and you look at the books, the average book is like 300 pages long. That can be intimidating. If mom raised you that once you start something you got to finish it, then a 300-page book, there's some big risk in cracking it open. Whereas if you treat that as an experiment and say, "Look, I'm just going to read the first 10 pages and see how I feel. And if that's good I'm going to continue," then a book is not so scary. Then the next thing you know you read 10, 20 and 30.

And if it's a good book you get all the way through it. But what got you into in the first place is you were willing to treat it as an experiment. Because if you go whole hog, if you've got to do the whole thing that scares people away. And so you can go through your whole life with this method. It's like, "Look, I'm going to try this. I can put up with anything for a day. I'm going to see how this works." And so you get in the habit of you're failing but ideally you're failing forward. You're failing in a way that has a little bit of learning attached to each one. And historically, the most famous guy in this experimental category here in the US is this guy, Thomas Edison. And do we tend to think of Thomas Edison as a success? I think we do.

I think he's the most prolific inventor in the history of America. He made light bulbs, of course we all know, phonographs. He had a whole long list of things including tattoo pens. In fact I think we're using Edison's design today in the tattoo pen department. He also left us General Electric, which is going pretty strong still after all these years, 120 years or whatever it is. But Edison, we think of him as a success? No. He was piling up all kinds of failures. He wouldn't use that word. At one point in his life he said, "I haven't failed. I've just found 10,000 ways that do not work." He was trying to come up with the filament for an electric light bulb, 10,000 things he tried.

Think how frustrating that must have been. Well he stuck with it and it worked out pretty well in the end. So he treated life as an experiment. He had this great group and this great team around him and they were doing multiple experiments everyday until they came up with a success. And the fact that one of them failed, no big deal! I've got 9,000 other failures out there. And so Edison, way long time ago, so some people especially people of age, some of the people in the room think, "Oh, that's a 19th Century example. Don't talk to me about that." Here's two examples from the 20th Century that have spilled over into the 21st Century, WD-40. Anybody have any WD-40 at home? I suppose it's not that convenient in dorm rooms but trust me, almost every house in America has got WD-40. I spoke in Brazil recently and they all had WD-40 in their houses. Ever think

about the name? I didn't.

"WD" that's obvious because it's an oil so it does water displacement. Catchy, a name only an engineer could love. Anyhow, WD, but the "40" is what I want to talk about. "40" is because the first 39 formulas failed. They stuck with it through 39 failures. They got the formula number 40 and they did darn good with that one. This is a consumer product unchanged for about 50 years and you never get a chance to that but WD-40 did. And then that is nothing compared to this guy, James Dyson. Anybody ever seen his cyclonic vacuums? They reportedly work pretty well. Anyhow, lots of people.

OK. Anyhow, James Dyson, if you read his book, Jim Dyson says he had 5,128 failures, 5,128 prototypes before he had something he could sell. Man, that must have taken a long time. But he did pretty well in the end. He's one of the richest guys in the UK because his products ended up being such a tremendous success. But 5,128 failures along the way, I got two questions. If I ever meet Jim Dyson I'm asking him two things. The first thing is, "Why did you keep track?" Once I go over a thousand failures, I would just say lots. I don't need to know when I've ended up 5,000 failures, just a lot of failures. But way more important than that, which relates to my comment earlier is, was he married at the time? Because that is one patient spouse.

I can just see her saying, "Jim, get out of the garage and get a job!" But he didn't and he stuck with it. He had lots of failures. He was willing to tolerate lots of failures and it worked out pretty well for him in the end.