



Stanford eCorner

The Art of Teaching Entrepreneurship and Innovation (Entire Talk)

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Stanford Technology Ventures Program's Executive Director Tina Seelig shares rich insights in creative thinking and the entrepreneurial mindset. Her talk, based on her 2009 book, *What I Wish I Knew When I Was 20*, cites numerous classroom successes of applied problem-solving and the lessons of failure.



Transcript

I am Tina Seelig and I play two roles here today. First, I am the host normally, but today I'm also the speaker. So I'm going to give you a little bit of my background so you know actually who am I besides of the person who usually introduces our other guests. I am the Executive Director of the Stanford Technology Ventures Program and along with my wonderful colleagues Tom Byers and Kathy Eisenhardt who are the faculty directors, we run the Stanford Technology Ventures Program. And we spend all of our efforts thinking about research and teaching and outreach efforts all related to high-tech entrepreneurship. My background is a little bit unusual. I actually did my PhD over at the med school. I do have my PhD in Neuroscience, and after that I've done a bunch of different things. I was a management consultant. I was a multimedia producer.

I worked at Compaq. I started a company. And I also have written a whole bunch of books. And this talk is about the most recent book I wrote called "What I Wish I Knew When I was 20." Now, there's an interesting story behind this talk because I actually gave a talk by the same name three years ago right here. At that point this talk was extremely raw, it was brand new, it was just the beginning of some ideas. But what happened is the talk ended up really getting some traction. And a years ago, almost exactly a year ago, I was asked by HarperCollins to turn this talk into a book. And so over the last year I spend a lot of time digging in to these concepts and came up with a bunch of really new and interesting stories, and in fact changed my point of view on some of these ideas. So I'm going to tell you a little bit about what's inside this book and invite you at the end to ask whatever questions you might have. OK, so as part of my role at STVP, I have the incredible honor of teaching a course on creativity and innovation.

In fact, I see some of my students in the room. And the entire overarching theme of this class is that all problems are opportunities; the bigger the problem, the bigger the opportunity. Anyone in my class would probably be able to recite that in their sleep, right? Any problem is an opportunity. The bigger the problem, the bigger the opportunity. And what I do is I give students problems. They start out as really small problems and over the course of the quarter they get bigger and bigger and bigger until finally they just get extremely comfortable taking on challenges and looking at them through the lens of possibilities. Now, don't just listen to me, I mean why should you listen to me telling you that problems are opportunities? This is something that is embraced by the entire venture capital community and the whole entrepreneurial community. In fact, I'm going to play you a video clip that I play all the time. It's one of my favorites. It's by Vinod Khosla.

Do you guys know who Vinod Khosla is? Who is he? Founder of Sun Microsystems, successful venture capitalist, and this is a 27 second long clip where he talks about problems as opportunities. Vinod Khosla: One thing I would say is..To me, every big problem is a big opportunity. If you think about it, no problem, no solution, no company. Very simple. Every big problem is a big opportunity. If you don't have a big problem, you don't have a big opportunity. Nobody will pay you to solve a non-problem.

Tina Seelig: In fact, I see that was a talk where Tom Byers, my colleague, was introducing him, interviewing him. And this is a clip that we play in all of our classes because this is the essence, the core of entrepreneurship. So how do you teach this? How do you teach people to turn problems to opportunities and look at the world as opportunity rich? Is it like this? Is this what you do? You line people up in rows and columns right? In fact it kind of looks like this room right here.

Everyone lined up in rows and columns, the chairs bolted to the floor. God forbid you actually talked to anyone else or move around. It looks like everyone is taking a multiple choice test where they are filling out one right answer to every question, filling it out with the number two pencil. Is that how you teach creativity? I don't think so. This is the way you teach creativity. You get people out of their comfort zone. You get them jumping off of perfectly good cliffs. You get them to feel it in their gut. It's not necessarily a completely intellectual experience. You need to be able to take risks to do things you haven't done before to take on problems that no one knows the answer to.

So what I'm going to do is tell you about some of the things that we do in our classes to help people have this experience. So a few years ago, I was at the d.School, the Design Institute at Stanford was just starting off. There was the first year there was a boot camp class. There was a whole cast of thousands of people teaching the class, and I was asked to teach one week that focused on entrepreneurship. "Tina, will you teach one week that gets folks understanding the general principles and the ideas of entrepreneurial thinking." So I thought, what can I do? So what I did is I gave the students every team an envelope, and in that envelope was seed funding. How many of you know this story? OK, we're going to get cut to the chase in the second and go on to the next stories, but this one is the first assignment I gave. They had an envelope and in that envelope was seed funding. They had four or five days to plan as long as they wanted, but as soon as they opened that envelope they had two hours to make as much money as possible. Now, for those people who don't know this, the folks who don't know the story, how much money do you think I gave them? Any guesses? Audience: 500 Tina Seelig: \$500, anyone else? Yeah. Audience: \$5 Tina Seelig: \$5.

I bet you know this story, OK. I know you know the story. So OK, let's cut to the chase here. I gave them \$5 and two hours to make as much money as possible. So what would you do if you were given this challenge? What would you do? Think about it. Does anyone have any ideas, any thoughts? Audience: Organize a party. Tina Seelig: Organize a party. Invite everyone and are you going to basically charge people? Audience: Absolutely. Tina Seelig: Absolutely. You charge people to come to your party.

Love that idea, great! I'd love to come. How much are you going to charge people? Audience: \$10. Tina Seelig: \$10, so how much is the party is going to cost? Audience: About \$50. Tina Seelig: About \$50 so you only need five people to break even. OK, good. Anyone else, another idea? What you might do with \$5 in two hours? First of all, you guys get gold stars because usually when I ask that question the first thing anyone ever says is, "go to Las Vegas" or "buy a lottery ticket." Really, they feel like, well I should take a really high risk for earning a big reward. Of course, we all know that the high likelihood is you're going to walk away with nothing. Well, let me tell you the clue. The teams that made the most money didn't use the \$5 at all. They realized that the \$5 was actually a limitation.

They realized that that framed the problem way too tightly, and if that they looked at the skills they had and the opportunities around them that was worth a lot more. So with that in mind, what do you think you would do? Any thoughts? OK, since you're being shy I'm going to tell you. I'm going to give you a couple of examples. One team set up a stand in the middle of the student union here at Stanford in front of Tressidor. They put up a little sign that said, "We will measure your bicycle tire pressure for free, but if you need air in the tires, we will charge you a dollar." Pretty cool? Well, first they thought they were taking advantage of their fellow classmates because people could go around the corner and easily get their bike tires pumped up for free. But you know what, they realized halfway through the two hours that people were incredibly appreciative. And so what they did is they stopped asking for a dollar, and half way through they asked for donations instead, and you know what happened? People paid them much more. And they walked away at the end of two hours with a couple hundred of dollars. Pretty cool? Now there were some interesting things that fell out of this experiment. First of all they realized that iterating along the way experimenting was incredibly valuable.

They could have stayed in their dorm room, written a business plan, and they never would have learned the fact all of these things they learned along the way that here by asking for donations they actually made more. So by rapidly prototyping, experimenting, and trying things out along the way they actually learned a tremendous number of things. So let me tell you what another team did. Another team realized that on Saturday night there are all of these restaurants in Palo Alto that have really, really long lines. And so what they did is they made reservations at all of these restaurants, right? And as the time came up, they sold their reservation. It was a brilliant thing and again they learned some amazing things along the way. First of all, they learned that the women students were much better at selling the reservations, people trusted them more. And second of all, they realized this work best in the restaurants that have the buzzers that tell you when your restaurant reservation time is up because it was almost like a reverse hand grenade. It was something like "Here take this it's going to go off," and it was something tangible they can give. They was another added benefit there because once they give someone this buzzer they got

that buzzer in return, and they now could trade that one and sell that one later in the evening, pretty cool.

So again the students realized there was no excuse for ever having no money in their pocket. All they had to do is look around and see the opportunities in their midst. But I have to tell you; the team that made the most money completely challenged all the assumptions. They realized that the most valuable thing they had was not the \$5 and was not the two hours. The most valuable thing they had was their three minute presentation time in class, which they sold to a company that wanted to recruit those students. Pretty amazing? It was brilliant and again the lesson here is that so often we frame problems way too tightly and if we keep unpacking and unpacking them we realized that we have resources that are much larger and more valuable than we even imagined. But we also realized that our own skills that we have and the opportunities around us are bigger than we ever thought at the beginning. So this was a great experiment and I was delighted with the outcome. I always like to give experiments and class assignments where I don't know what the students are going to do because they always do much more than I ever imagined. But at the end of this project, I felt a little bit uncomfortable.

A little bit uncomfortable, because I felt as though that I was communicating to these students the value is measured only in terms of money, and we certainly know that that is not the case, right? Value is measured in lots of different ways. So the next quarter in my creativity class, I gave this assignment again. But instead of giving the students \$5, I gave them a handful of paperclips. I was inspired by the guy - do you guys know the story of the guy who had one red paperclip and traded it for a house? How many of you know about the red paperclip guy? OK, for those who don't know about it this is a guy a couple of years ago who decided he really, really, really wanted a house and all he had was one red paperclip. So he put it on a blog. He said, "I will trade this paperclip for something anything." So he traded the paperclip for a pen, and then he traded the pen for a doorknob, and the doorknob for a Coleman stove. Anyway, he kept getting bigger and bigger things until finally at the end of the year he had a house. Now granted it was in Saskatchewan, but it still was a house. I thought I was being incredibly generous by giving my students ten paperclips and four hours. Let's see what they could do.

So what do you think, what would you do if you had ten paperclips and four hours over the course of a week, what would you do? Any ideas? Any thoughts? Anyone from my creativity class? OK. Well let me show you what one of the teams did. Can I ask the folks in the back to turn down the lights, OK. OK, for those of you listening to the podcast, this was a video of students breaking in to a dorm room, or actually fraternity, and stealing tons and tons of things and walking away with \$23,000. You can imagine my reaction. I was lying on the floor in the classroom, I kid you not and I said, "I used to like this job. I really, really, really liked my job," until the students said, "Just kidding. Here's what we really did." And what they did was very clever; this is one of the teams in the class. They traded the paperclips for some poster board, and on the poster board they made a sign that said, "Stanford students for sale. Buy one, get two free." And they went over to the Stanford Shopping Center and they stood there with the sign, and they kind of wanted to see what would happen.

So what they did is they initially started talking to people and most folks said, "Well gee, can you carry my packages, can you take out the recycling, and all of these were low hanging fruit." Until they realized their skills were much bigger than carrying the bags and taking out the recycling. So they started telling people they were engineering students. They told them they were in a creativity class and the opportunities got bigger. One fellow asked them if they would design a radio transceiver. They said, "We could do that, but it'll probably take more than four hours." So they passed on that but a woman came up to them who was a business executive and she said, "Gosh, you're in a creativity class, can you help me out? I've got a business problem in my company and I really could use some brainstorming." So they said, "We can help." So they went over to her office, they led a brainstorming session with all of her colleagues. She was so delighted with the outcome that she paid them with three computer monitors. So they came to class starting out with ten paperclips and walked in with three computer monitors. Pretty cool? So that was great, and again the students realized that even starting with nothing they could essentially nothing they could create some value. So this project grew into something that got a lot bigger, because what happened is we got a call at the Stanford Technology Ventures Program. We got a call from the Kauffman Foundation and the Kauffman Foundation said, "Hey, guess what? We have decided to run National Entrepreneurship Week, and would you guys take the lead of running something at Stanford?" We said, "No problem, that would be easy." So we called up our colleagues around campus, the Stanford Entrepreneurship Network and put together a whole host of activities over Entrepreneurship Week.

There were talks, and workshops, there were panels, there was venture capitalist speed dating. All of these were well and good. But I kept having the vision of that guy jumping off the cliff and I said, "How can we have an entrepreneurship week if we don't get people the opportunity to feel what it feels like to be an entrepreneurial?" So came up with the idea of running this type of exercise with the whole campus. So told the Kauffman Foundation about this and they said, "How fabulous. Can we roll this out across the country?" We said, "Of course, but let's not stop there. Let's roll it out around the world." So during Entrepreneurship Week, we sent an email out to all of our colleagues around the world and they ran this competition with their students and the challenge was this. We gave them one pack of Post-it notes. So every team had one pack of Post-it notes. We didn't give them a time limit this time. We said, "You've got five days over the course of Entrepreneurship Week to create as much value as possible using a pack of Post-it notes.

Value measured in whatever way you want. So folks, what would you do if you were given a pack of Post-it notes? Any ideas, any thoughts? What would you do? You're all too shy today. OK well, let me show you what one of the teams did and you tell me what kind of value has been created. Pretty cool? For those listening to the podcast, this was a little infomercial showing all the appliances in a dorm room and it says, "It took us 23 hours to make this video. It takes one second to unplug an appliance. This spring break, do your part, unplug it." This was put on YouTube, is watched by thousands of people, and what's the message here? What's the message? Saving energy, right? I know that when I went away that spring break I went into my office and unplugged everything. It really had an effect on me and I'm going to guess it had a big effect on everyone else. So with one pack of Post-its and 23 hours they created a lot of value. The projects that were done with Post-its were truly remarkable. There were collaborative music projects.

There was actually a non-profit company was started called Gumball Capital, they came out of this, and I think it was a huge success. The next year we did it again and you can imagine students all year who had seen the showcase and seen what had happened were very excited about participating. We packed Memorial Auditorium. It was packed to the gills. John Hennessy, the President of Stanford, got up to welcome everyone to Entrepreneurship Week, and everyone was waiting to get to see what the new challenge was going to be. And we got up there and revealed and took the lid off the box and showed them what the next challenge was and the air was sucked out of the room. Because nobody had any idea what to do with the rubber bands. They've been thinking for year about Post-it notes now the challenge was rubber bands. Our goal was to stretch their imagination. So what would you guys - that's kind of worked, right? What would you guys do if you had a handful, actually as many as you want? We gave them whatever size they wanted, whatever color, whatever shape, as many rubber bands as they wanted.

What would you do? Well, let me show you what one of the teams did and you tell me what kind of value was created here. Male 1: Tired of bikes gobbing up your laces? Troublesome doorways? Loose laces caught in vicious vacuums? Constantly fighting your garbage disposal for your shoes? Being hounded at school by shoe bandits? You need Shoe Bands. With all the revolutionary technology you'll never worry about shoe laces untie it again. Shoe Bands will make you more stylish, loose ten pounds instantly, and will save baby penguins from global warming. Everybody loves them! 50 years of R&D utilizing six sigma, lean production, and other buzzwords processes, went into the development of Shoe Bands. Made from pencil erasers, our rubber is vulcanized twice to remove bad karma. Here's what our customers have to say. Customer 1: As an athlete, I need my shoes to stay on. Velcro provides some security, but to really get the job done I use my Shoe Bands. Male 1: Recently one of our customers wrote in to tell us about the experience where her Shoe Bands saved her life.

Customer 2: Should have worn Shoe Bands. Male 1: Ever since I started using Shoe Bands, I jacked up my bench press by fifty pounds. Sometimes I "double Band" it. Male 2: Hello. I'm the founder of Shoe Bands Incorporated. But not only am I the CEO, I'm also an avid and dedicated customer. Male 1: Through this exclusive TV offer, receive not two, but three packs of Shoe Bands for just five easy payments of \$19.99. But wait! Call within the next 60 seconds and we'll slash a payment and send you a llama. That's right, a llama. Order today.

Tina Seelig: OK good, pretty cool? Did you all need Shoe Bands? Anyway, this was really fun and this was sort of humor, they create a lot of humor with this, but there are a lots of tremendously exciting projects that were done with this. If you're interested if you go to the ECorner website and put in "tournament" in ECorner.Stanford.edu and put in "tournament" in the search box, you can get all the winning submissions for this last year and this year's project. In fact, I'm reminded as I look at one of our colleagues in the audience, is you want to actually be following this talk you can follow us on Twitter @ECorner, right? So, I know I forgot to say that in the beginning. OK, so this is all about turning problems to opportunities, looking at the world as opportunity-rich, basically making something from nothing. But you know what? Being an entrepreneur is much more than just that. That's the tip of the iceberg, or might be the core of the iceberg, but there are lots of other things that you need to do to be successful entrepreneurs. And one of them is: You need to be able to make your own luck. Now this is interesting: When I gave this talk three years ago, this didn't say make your own luck. It said, "The harder I work, the luckier I get," because that's what my father taught me. My father taught me that the harder you work the luckier you get.

I really, really absorbed this idea and I learned to work really, really hard. But as I have been thinking over the last three years, I've learned that there are many other things you can do to make yourself lucky. Hard work is only one lever that you have at your disposal, because you can make your life lucky. You need to be open-minded. You need to be optimistic. You need to look at the world through a special set of lenses. In fact, one of my colleagues from Chile, Carlos Vinola, always says to his students, "If you go into a room and you do not meet someone new, at the least you've missed out an opportunity of learning something or making a friend, and at the most, making a million dollars. In fact, it's really true. He says any room there's a million dollars waiting for you. You just have to find it.

It's funny because a couple of weeks ago when we were hosting Steve Ballmer as a speaker, that made sense. He was in his dorm and down the hall was Bill Gates. There was certainly more than a million dollars down the hall, right? So I encourage you to look around at all the people who are sitting right here. Where are the opportunities? And this happens everywhere all

the time. Let me tell you a funny little story that brings this to life. A few years ago when my kid Josh was little, he was probably this big, I was at the grocery store. And this is about making your own luck, right. And you never know what you're going to find when you say hello to someone. I went to grocery store and this man came up to me, he was there with his little daughter, and we were in walking down the frozen food aisle, and he had a can of lemonade, and he said, "Can you explain to me how to make this lemonade?" Now he had an accent, he wasn't from the area, and he certainly didn't know that you put three cans of water in with a concentrated lemon juice, so I explained it to him. But that wasn't the end of the conversation, because for most people though they'd say, "Thank you very much, you're welcome," and that's the end.

But I had thought what is he doing here, I'd like to know a little bit about more about him. So when I got in line at the checkout stand there were several choices and I got in line behind him. I was not stalking him! I just was sort of curious, and that's the point it's about being curious, OK. So I started chatting and I said, "You seem like you're new in town, what are you doing here?" So at first he was a little bit cautious, like why are you asking me this but I was very friendly and nice and he said, "Well, I'm here, I'm from Chile. I'm from Santiago, and I'm going to be taking over my family's business, and I am here in Silicon Valley for a while to learn about entrepreneurship and innovation." I said, "That's so great. I actually work at Stanford and involved with this program where we teach people about entrepreneurship and innovation and I'd be happy to help you out. So here's my card, if I can be helpful at any way feel free to give me a call." So he gave me a call or sent me an email and I introduced him to a few people who might be helpful. I had some friends who are from Chile who I got him connected to. He ended up bringing an entourage of people to the area who knew... He brought the president of the country and 2,500 other people.

But he was a really nice guy and I just was helpful. A few years later, I end up finding myself down in Chile. I went down, we were running a conference there, a round table on entrepreneurship education, and I was there with a couple of my colleagues you might know them, Debra Dunn and Randy Commisar, were there with me. And I called up - his name is Eduardo and I sent him an email and I said, "Eduardo, I'm going to be down at Santiago. Can we get together for a cup of coffee? Would that work for you?" He said, "That would be great." But as the time came up, he sent me another message, said, "You know I'm too busy I just can't make it but do me a favor, go to this building there's an office building in the middle of the city. Go there and bring a couple of colleagues," - and that's why I mentioned Debra and Randy because they came along with me - and he says, "I've got a treat for you." So we went there, we got met by one of his colleagues who took us up to the roof of the building. We were picked up by his family's helicopter, flown over the city. Taken up to his family's ski resort, and back down to the city. And that's what it's all about. The point is, here is the deal, being an entrepreneur and making your own luck is not about turning lemons into lemonade.

It's about turning lemonade into helicopters. OK, I'm going to start with the lemonade and get a helicopter and that's the point is that you can make amazing things happen. It's not just turning problems to opportunities, it's making really amazing things happen. So let's go on to the next thing that entrepreneurs can do to make themselves successful. They need to know how to fail, fast and frequently. OK, the fact is as many of my colleagues say, "If you're not failing sometimes, you're not taking enough risks." Failure is the secret sauce of Silicon Valley. If you look at the number of ventures that get funded and the numbers that are successful, then you have to conclude that venture capitalists actually invest in failures. And it's clear that the ratio between our successes and our failures are actually pretty stable. So if you want more successes, you're going to have to put up with up with more failures. In my class I usually have my students make failure resumes.

This is a resumes of their biggest screw-ups, personal, professional, and academic. And the idea is it is OK to fail as long as you learn something from it. Listen, I put myself out there all the time so I have many opportunities to learn how to fail gracefully, and I have to tell you get better at it. This is really an important part of being an entrepreneur is put yourself out there. I was thinking about as we talk about Twitter, following us on Twitter. Well, think about Evan Williams started Blogger which was a success. Then he started Odeo, which failed. Then he went on to start Twitter, which is a huge success. If he had stopped after the failures saying, "Forget it, I'm done," we would never have had the next success. So you need to be able to put yourself in a position where you're willing to try and try again.

So I'm going to play you a little video clip now that comes from the Innovation Tournament, and this is a team from the challenge where we use rubber bands that had a flaming failure. And see what happens. So for those people who are listening and couldn't see that, this was a team who tried to make a wishing tree were people post all their wishes on a tree, and it failed miserably. They tried everything they could think of and at the end they said, "You know what? Celebrate entrepreneurship, celebrate ideas, celebrate failure." But here is the punch line and the most important part of this. This team here is made up of the bio design fellows. These are students, these are folks from the med school, from the business school, and the engineering school who spent a year shadowing doctors and identifying opportunities, coming up with new inventions, and eventually putting together a business plan. This team that failed at this won first place in the Stanford Business Plan Competition. And that never would have happened have they not have this attitude. If they had not known that they have to fail many, many times along the way before they came up with something that was a big grand success. So let's move on to another concept and that concept is "Don't wait to be anointed." We all think that when we go into organizations, we are waiting for people to tell

us what we are to do, right? We look for jobs.

We wait for people to give us our assignments. But you know what? In most organizations there are endless other opportunities waiting there for you to turn into something wonderful. I realized the other day that when you get a job you aren't getting that job. You are getting the key to that building. And as soon as you're in that building it's up to you to figure out all of the other things you can do. And if you look at people who have really been successful that is what they have done. They haven't waited for other people to anoint them, for other people to tell them what to do. It's funny because this happened in my own life years ago when I started my first company. It was 1991 and I had written my first book and I said, "You have got to be kidding. There's got to be better way to market books." So I decided to start a company called BookBrowser that was a multimedia system to try to match books with buyers, and this was before the Web.

It was a kiosk-based system and I pulled together all the ideas, and I put together a team, and I printed up business cards that said, "Tina L. Seelig, President." And I showed them to my dad. My dad looked at me and he said, "You've got to be kidding. You can't just call yourself President." Now, he had been a very, very successful multinational corporate executive and had risen up for the ranks from being an individual contributor, an engineer, and every couple of years getting a promotion, and promotion, and promotion, and promotion. So he looked at me as this little kid and said, "You can't just call yourself president," and I realized that was what entrepreneurs do. Entrepreneurs make their own business cards. They are the ones who are willing to build the ladder below them, as opposed to waiting for someone to put the ladder up in front of them. And this doesn't just happen with starting a company, it something that happens in any organization that you can be part of. And I'm going to play you a video clip that again came from the Innovation Tournament. This is the one with the rubber bands, and this is a team that captured the essence of the difference between that little switch between doing nothing and doing something.

And how important it is if you just give yourself permission to take on challenges, you will do amazing things. So watch this: Male: I worked out for the first time in weeks. I guess I wept deeply with joy. Female: I finally took my chubby butt to the gym. Male 2: I carried a package for someone who was overburdened. Male 3: I said "thank you" more often. Female 2: I mustered up the courage to ask my crush out. Female 3: I spoke with my dear friend on the phone for an hour-and-a-half. I'm so glad to reconnect with her. True friends are treasures in life.

Male 4: The Do Band is based on two insights we had. One, you can't force someone to agree with your cause. Without buy-in, nothing real is going to happen. Two, everyone has their own cause; something they should do. They want to do but they just never get to it, and this is what we're after. We want to get people over their block and get them to do it. Enter the Do Band. Female 3: The Do Band has a simple set of rules. One, put it on with a promise and don't take it off until you've fulfilled it. Two, record your success online, share your story.

Three, pass it on. Male 4: Every Do Band comes with a serial number. When you record your success you can see what else your band has inspired. Each Do Band creates a chain of successes, and that's just one Do Bands, with many Do Bands it grows even quicker and with the addition of the Virtual Do Band, the numbers multiply astoundingly fast. Male 5: Do Bands, got locked by that promise. Male 6: What's happened with your Do Band? Male 5: I actually passed it off. Male 4: The Do Band creates value by appealing to our inner desires. In just 36 hours, we created social value, health value, entertainment value, and political value, to name a few. We may not have collected \$500, but Do Bands kicked off a new summer camp, initiated tons of phone calls to mothers, inspired compliments and apologies, healthy eating, and many other personal contributions to the greater good. These little things add up and success is infectious.

And one more thing: Actually, people did donate over \$500 to the charities that they chose, and this is only in the beginning. Imagine it. Tina Seelig: Pretty cool? It's so wonderful because a bunch of people around the world have seen this and other schools around the world had actually started doing this. Students have taken on this project and started passing around Do Bands in websites, and it's quite amazing the number of things that have been inspired just by this project. So, I want to end with a last theme, and that is "Never miss an opportunity to be fabulous." Now, this idea came out of something that happened by accident. A few years ago when I started teaching my course on creativity and innovation, I never used slides in my class. They're always, its very action oriented. But the first day of class I do so show some slides that described what's going to happen during that quarter, and on the very last slide I have some list of the things that I expect from the students, and what expect to myself. And the last bullet point is "Never miss an opportunity to be fabulous." I promise that I'm going to do my very, very best. I'm going to deliver as much as I can at every single class, and I expect the same from them.

It's the first and last time I say it. But you know, this concept is incredibly sticky. And I think the reason it's so sticky is that people are waiting for this instruction. Think about it: In most classes people tell you what you need to do to get an A, and I certainly watch my kid who is now 20 years old and I watch him do the minimum amount to get an A. But could you imagine if everyone in the world only does the minimum amount to get an A, nothing amazing will happen. The key is we are all waiting to take the lid off and be told the sky's the limit. Well, let me tell you what happened with this. After I put the slide up, a few months later I kind of forgot about it and I was coming to class and there was someone, one of my students, who was sitting outside the classroom. Because she was listening to an iPod Nano, and she was kind of rocking out before class. And I said to

her, "Boy Becky, I've never seen an iPod Nano before can I take a look at it?" She said, "Sure." She unplugged it and hand it to me.

And apparently when you order one online you can have it engraved with whatever you want. Some people put their email address with their phone number in case it's lost. She turned it over, and what do you think was engraved on the back? "Never miss an opportunity to be fabulous." This is what she wanted to look at every single day, and I think that's what we all want to look at and especially when you're an entrepreneur. Every single day you are faced with challenges, and everyday you have to find an opportunity to be fabulous in a way that you solve problems, in the way you approach organizational issues, in the way that you deal with everything that comes your way. So I'm going to end with a video clip that comes from a movie that was made about the Innovation Tournament. What happened is when - I told you at the beginning the Kauffman Foundation was enthusiastic about us rolling this out across the country and around the world. Well, they had a professional film crew that was capturing us, and they decided that they wanted to see what was going to happen with the Innovation Tournament. So they put film crews around the world. They were in Japan. They were in Australia.

They were in India. They were in Ecuador. They were in Thailand. They were in the US, and this is a trailer of the movie they made. The movie is called "Imagine It," and this is a trailer of the movie they made about the project with Post-it notes. I think you'll recognize some of the folks in the movie. Male 1: Imagine the future the way you'd like to see it. Female 1: If you can imagine it then it can be. Male 2: Got to the problem and imagine a world where that problem has been removed and then say, "How many steps are there from this world to that world?" Female 2: Imagining a new future, a new path, a new direction. Male 3: If you had the power to imagine it and you had the power to change the world.

Male 4: Imagine a more perfect world than the one we live in, and then to actually engaged in making that happen. Female 3: People think that pressure is bad. But pressure in a very short period of time can be very stimulating. Female 2: It taps into the rawest level of their creativity. Female 1: It puts down a gauntlet of challenge and inspiration. Male 5: You'll never have infinite resources. When you're given this constraint and this constraint is opposed to that. Male 6: We define the value of your own projects innovating outside the box. The box here is actually goes to you. Female 4: Entrepreneurship is an extreme sport.

Getting it out and do it. Male 7: This is an important way to progress in life so the experiment can focus. Male 8: I'll bet you that you'll be blown away. Tina Seelig: So I hope you would agree that these sort of experiences in our classrooms and hopefully that many of you had an opportunity to participate in. Give students a really strong parachute even though we might push them off of a perfectly good cliff, and ask them to take some risks and try some things they've never done before. You can look at the journey as something that's really exciting. The fall is isn't a freefall; it's something that when you have all these skills when you make your own luck and never miss an opportunity to be fabulous, you end up creating this fabulous parachute for yourself. So I am going to end on that note and take any questions that you might have, and we've got a few more minutes. Thank you very, very much. So any questions, thoughts? No, everyone shy.

OK, nobody. Yes. Audience: Are your class available for undergraduates? Tina Seelig: Yeah, there are some undergrads in my class. It's mostly a graduate class, but we have an incredible range of classes in the Stanford Technology Ventures Program, and I encourage you to look at all of them. There are a wide range of classes that are available. If you just go look at STVP.Stanford.edu you'll see all the classes that are available. Any other questions, comments? Yeah. Audience: You mentioned make your own luck. Given in what you're doing, I would say create your own luck, and the second piece is fail fast and frequently. I would say add cheaply because, if you do it early then it's cheap.

Tina Seelig: So the comment was fail fast, frequently, and cheaply like quick rapid prototypes. You got to do things that are fast that don't cost very much and you can experiment along the way, absolutely. Really good point. Any other thoughts? Yeah. Audience: I'm curious how your degree in neurobiology plays into your career and experience on that. Tina Seelig: It's interesting that it's a really good question. I have thought of that a lot. I'm a neuroscientist doing this. I think the thing that is consistent about all of this is I love to play at the frontier. I love to be somewhere where you don't quite know what's going to happen next, and so these sort of projects are very much experiments.

You put them out there and you see what happens, and that's the same sort of thing you do in your lab. But let me tell you a little funny story that this reminds me of and it's a story I tell in my book, about how in our careers we can parlay all the things we do in all different directions and make some really interesting sharp turns. So when I finished my PhD in neuroscience, I decided I did not want to stay in the lab. I wanted to go out, I actually wanted to work for a biotech company, and was having a very difficult time finding a job. The job market was about the same as it is now; it was really tough. And I was having a difficult time finding a job especially since I wanted to change directions. And I ended up after a long period of time getting an introduction to the head of Booz, Allen, and Hamilton in San Francisco; so, a management consultant firm. And my hope was that I could go in and that they would be impressed enough that they would introduce me to some of their life science companies, that it would be kind of part of my networking. When I walked in and the guy who was the head of the office said that, "Why would someone with a PhD in neuroscience be a good management consultant?" Now I could have told him the truth which was that I really haven't considered that, but I didn't. I thought quickly and I said, "Well, doing neuroscience

research, doing brain research, and doing management consulting is exactly the same skill set.

And he said, "Oh really, tell me more." And I said, "Yes well," and think about it gang, listen. I said, "You need to figure out what the burning questions are. You need to figure out how you're going to get the data to answer these questions. You need to go and gather the data. You need to analyze the data. You need to figure out how to present it in some compelling way, and then you need to figure out what the next burning questions are." And I walked out at the end of the day with a job offer. So I think the fact is learning how to learn, learning how to think, learning how to ask questions, and learning how to work in situations where there's uncertainty. When you are a scientist, you are in a situation where things are uncertain, and that's as an entrepreneur it's the same. You're working the situation where it's not clear, you don't have all the information, and you need to make decisions without complete information. Yeah.

Audience: As an entrepreneur how would you choose your team and what would it be the points you would look at? Tina Seelig: Wow, how would you choose your team? I think as all of our students who come out at our classes would say that is basically the most important thing is being surrounded by the very best people. And I think one of the things that students here have that's a huge asset is all the folks who were here in school with them, and I would go out of my way to get to know as many people as I could and get to see them in lots of different situations. Because often you hire someone and it's not until that's kind of like - you hire somebody it's like getting married. And yet you would never get married to someone after just interviewing them for a few hours, would you? So I would get as many ways as possible to learn who they are, to get to see them in different situations so I could pick someone who's a really good match. Yeah. Audience: How did you make the jump to entrepreneurship? Because there's a lot of fears, there's a lot of obstacles so like how did you overcome them? Like, was there some specific event in your life or some person you talked to? Tina Seelig: The question is how did I jump to entrepreneurship? Now, I started this company in 1991, I really didn't know what I was doing and I wish I wish I wish I had been through the programs that we teach here. The outcomes would have been really different if I actually knew what I was doing. But I had a lot of gumption, a lot of chutzpah and I figured I could figure it out. And I was extremely motivated by solving a problem, and I think that's the thing that really helps entrepreneurs if there's a problem. I was an author and I said, "You have to be kidding, there's got to be a better way to market books." How many of you in the room have written books? OK, I talked to these folks.

They will tell you, you write a book and the publisher like leaves it on the doorstep to see if anybody finds it. I said, "Whenever I was out talking to people, my audience was enthusiastic and they would buy a lot of books. But when I wasn't there nobody was buying." In fact my first book was on the chemistry of cooking. OK, don't ask. It's called "The Epicurean Laboratory: Exploring the Science of Cooking." Well, the book starts we put it in the cooking section, but it was really a science book. And I was motivated to write that book because I knew in great depth what was happening in my lab but not in my kitchen. I made a list of all the questions I had and it turned into a book because I couldn't find the answers. Again, it's always about turning problems into opportunities, and that was a problem. Like I said, "You've got to be kidding." There should be product that when I go to a bookstore I can look at books by title, by author, by subject, links to other books of interest, and isn't it crazy the books are listed alphabetically by author? That's not how people look for books. And so the fact is that what's motivated me as trying to solve a big problem.

Amazon solved it better. Any other questions? OK well, thank you so much. The Stanford Bookstore was nice enough to bring over some books so if anyone is actually interested and cannot bear the thought of leaving here without a book, they're outside and I will be happy to sign it if you guys want to buy. Thank you so much.