



## Stanford eCorner

### Success Requires Resilience

Richard Miller, *Olin College*

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Video URL: <http://ecorner.stanford.edu/videos/4263/Success-Requires-Resilience>

Richard Miller, president of Olin College of Engineering, explains the importance of grit and mindset over traditional intelligence. Beyond equipping engineering students with formal skills, the nationally ranked university makes creativity and entrepreneurship core to its curriculum.

"Twentieth-century innovators require a lot more than technical knowledge," Miller says.



#### Transcript

- Twentieth century innovators, require a lot more than technical knowledge. This is a really important point. So for example, attitude plays a really key role. Entrepreneurial mindset, is a really important attitude. This is an old cliché, more often than not, your attitude determines your altitude in life. This guy doesn't even have legs, and he's climbing mountains a lot better than I ever could. By the way, it's not about your aptitude. Doesn't matter how good you are, it really matters how determined, and how committed you are, to making a success. This is the grit part, of what we were talking about. This is what Heckman found, is three times more likely to produce positive outcomes than what you know.

So it's this whole thing of mindset. Attitudes, behaviors, and motivations, which is critical to producing innovation. So what do you mean by mindset? Well there's a whole list of them. And this, I'm not making these up, this is a compendium of what we're finding from different industries that are identifying them. Entrepreneurial mindset, ethical behavior, teamwork and leadership, global perspective, interdisciplinary thinking, and so on, and so on. By the way, the National Academy of Engineering in the US, did a study recently, called Educate to Innovate. This was the primary conclusion. This is what's missing. They're not alone. Council on Competitiveness has been putting together a series of national meetings, on the National Engineering Forum, in many different cities.

The main outline for this, is Capacity, Capability, and Competitiveness. And what's missing in the capability is, this set of mindset skills. STEMconnector, which is a really interesting group, of about 5,000 corporations and organizations working together, to define the workforce for the twenty first century. Their conclusion, in particular, is employability skills, and innovation excellence, is critical. If we unpack that, what's it about? Mindset. Almost all of the things that they call for that are not in the curriculum now. And then IBM, has been doing this for at least 25 years. This sort of T-shaped person. And the T-shaped person is what? It's a person who has technical depth, but has a mindset, a set of attitudes and abilities to work across disciplines and with people in different fields, in order to integrate those three circles, so you can find the intersection in the middle. That's the idea.

So all of them are calling for the same change.