



## Stanford eCorner

### Real Innovation is Multidisciplinary

Joseph DeSimone, *Carbon3D, Inc.*

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Entrepreneur and university professor Joseph DeSimone shares a favorite saying about how scholarly research is “an expression of faith” and “a form of optimism about the human condition.” The co-founder of Carbon 3D, Inc. explains how Steve Jobs helped Apple achieve true innovation at the nexus of the applied and social sciences, technology and the liberal arts.



#### Transcript

- [Joseph] If you look around, there are so many opportunities. Actually, so many needs for big breakthroughs and big ideas. Whether you're thinking about new ways of storing energy, new ways of curing diseases, new ways of protecting information and cyber security or national security, and the opportunities for making an impact. In particular, being here at a university, and I love quotes, you'll see different quotes coming up. This quote here from Henry Rosovsky who was the dean at Harvard, one of my favorite: "Research is an expression of faith "in a possibility of progress, the drive that leads scholars "to study a topic has to include the belief "that new things can be discovered, "that newer can be better, and that a greater depth "of understanding is achievable. "Research, especially academic research, "is a form of optimism about the human condition." and I love the actual poetic-ness of that statement and that perspective, and it's what really drives me and historically, my students over the years. What Steve has done so well, and you think about what Apple has done, and you think about the intersection of great hardware and great software, but really thinking about how it changes society, how we interact with one another, how we think, and what that really is, is the convergence of disciplines, and I had the privilege of chairing a National Academies study on convergence and its impact on driving innovation. Historically, the word convergence and its meaning has often implied a convergence of the physical sciences, engineering, and medicine; in fact, that's the way MIT has classically referred to convergence, but I think what it really means is bringing together disciplines in maybe not so obvious ways, and thinking about what emerges from that, but I think more broadly and what Apple has done is I think you have to think about extending this to the social sciences, the humanities, and perhaps even the performing arts. Thinking about tech in the humanities and the liberal arts is an important aspect, and as part of that, I think a lot of people believe that convergence itself is actually a blueprint for innovation.