


How Professors Can Foster Innovation Amongst The Students They Teach

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Kate Vitasek covers how to crack the code on collaboration

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If it's your responsibility to mold the future's greatest minds, make a conscious effort to create ...

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Creative, innovative thinking is key to success. In fact, [research from McKinsey](#) has found that the top 10% of companies see 21% of their sales come from products or services that didn't exist the year before.

Innovation can be a significant driver of business growth — but it doesn't just apply to sales outcomes. An innovative mindset can spur creative problem-solving in any area of life or business, helping lead to more effective solutions that inspire lasting change.

As a college professor, I've seen firsthand the critical role that educators can play in fostering an innovation mindset among students. By teaching essential skills and techniques, college professors can ensure that today's learners become successful leaders and collaborators.

Emphasize Critical Thinking Skills

One of the most common criticisms of the educational system is that it emphasizes the memorization of facts, rather than the critical thinking skills needed to apply knowledge in daily life. This can directly stifle innovation, even when students are allowed to participate in discussions or group work.

As [The Critical Thinking Institute notes](#), “There is an essential difference between giving students the opportunity to think and teaching them how to think better. [...] Only direct methods of critical thinking instruction — actually teaching students strategies for thinking critically, such as methods for problem solving — are shown to increase critical thinking outcomes.”

College professors have a responsibility to teach their students critical thinking skills in a way that likely didn't happen during primary education. Helping students develop this mindset is a crucial first step that will allow them to take full advantage of future opportunities for innovation.

Provide Opportunities For Practical Application

One of the most important ways for students to innovate is by giving them ways to apply what they've been learning in a more hands-on manner. Whether in the form of a workshop, lab or simulation, activities that get students to directly engage with the material will help them internalize it and develop a more innovative mindset.

I recently had the opportunity to discuss this topic with Dr. Thomas Chen, professor of neurosurgery, pathology, and orthopedic surgery at the University of Southern California's Keck School of Medicine. He's also the founder of [NeOnc Technologies](#), which develops pharma-based therapeutics for central nervous system disorders and diseases.

Dr. Chen explained, “Problem-based learning activities can be a powerful way for students to internalize what they've learned and develop an innovative mindset. Giving them a real-world challenge and asking them to collaborate to find a creative solution helps them engage critically with theories and knowledge that might otherwise remain abstract. These experiences lay a crucial foundation for thinking more deeply and developing problem-solving skills.”

Incorporate Technology

The use of technology in the classroom has always seemed to come with controversy. And truthfully, there's often a good reason for the pushback that often comes with tech. As an op-ed piece from [The New York Times argues](#), many tech tools have not worked like they were supposed to in classroom settings, with tech often introducing new problems in elementary and high school settings.

However, while tech tools should be carefully evaluated to determine whether they are worthwhile for the classroom, college professors must also be mindful of the fact that this technology exists in the real world outside the class. Many of the tech resources available to today's students can foster innovative thinking if used responsibly.

And that's the key. College professors should stay up to date on tech innovations in their field so they can appropriately incorporate these tools into learning. From digital platforms that facilitate brainstorming to prototyping tools and software that help students test ideas, tech can be a valuable asset in fostering innovation. Strategic embracing of technology helps students recognize that what they are learning in the classroom applies to the real world as well.

Promote Collaborative Learning

Finally, college professors should promote collaborative learning experiences whenever possible. Collaboration and innovation [feed on each other](#), with collaborative projects being a valuable way to drive innovation in the business world. Exposure to different mindsets and skills can dramatically expand horizons and unlock new solutions as people from different backgrounds combine their ideas.

The same principle applies in a college environment. College professors can promote this type of learning by ensuring that projects require collaboration with peers. Classroom discussions should encourage diverse perspectives and viewpoints so all voices are heard.

As discussion and group work encourage students to share their ideas and collaborate to find solutions, they can feed off each other to develop new ideas. Allowing students to learn from each other will prepare them for future collaborations where their best innovations may come from working with people outside their area of expertise.

Creating An Innovative Mindset

College professors can have an outsized influence on the students they teach. I firmly believe that by emphasizing critical thinking, providing opportunities for practical application of skills and knowledge, incorporating technology and promoting collaborative learning experiences, professors can help students move beyond rote memorization.

By making learning more experiential and tailored to require creative thinking, students will be able to develop an innovative mindset that they can apply wherever their future takes them.