FAQ: What do students get out of project-based learning that they may not get out of conventional classes?

JONATHAN STOLK: At Olin we think about project-based learning as a really flexible pedagogical approach that enables instructors to think about goals that they might not be able to achieve in a traditional classroom. So things like communication or systems thinking, creativity and design. Maybe you care about your students developing self-directed learning skills or intrinsic motivation. You can imagine designing these into a project-based experience in a way that is really difficult to attain in a more traditional classroom environment.

FAQ: Is there proof that project-based learning is better for students?

STOLK: There’s a couple of decades of research that illustrates that project-based and other active learning approaches do that traditional learning of conventional approaches don’t do. One of the big things is, it enables students to develop more sophisticated cognitive skills. So if you care about things like analysis or creativity or synthesis or critical thinking, you’ll find that it’s easier to support these in more active environments. But it’s not just cognitive. Project based learning enables you to support student learning that is more social in nature. So relating to other people, communicating with others, collaborating with others. But also
emotional and motivational goals and psycho-motor, hands-on or mind-body connections in learning.

FAQ: How do you approach grading in project-based classes?

STOLK: The first thing you have to figure out in a project based class is, what is it trying to do? And different classes have different types of project with different goals. And of course, all the grading and assessment has to be aligned with those goals. So for example, I might be teaching a design class and have goals around divergent thinking and idea generation, understanding of users and communication of a design. That looks a little different than a more analytical class, where I might have goals around experimentation or scientific inquiry or quantitative and qualitative analysis. And so for each of those two courses, I’ll have to develop a structure of grading and assessment and feedback to students that is appropriate for that particular project.