

Pedro Quintana-Ascencio is a mentor on a mission. His goal? Empowering students to step outside of the academic norm.

“It is very important to convince students that they can have their own ideas, and that they can recognize the problems that are relevant,” Quintana-Ascencio says, adding that too many teachers, leaders, and mentors try to impose their own ideas on their students. And according to him, that is not the best way to positively influence others. “I understand that my role as a mentor is to help them to develop their own ideas.” Without that, argues Quintana, students’ levels of creativity are strongly limited, and they are less likely to create new content in their fields, which is essential to global competition.

Such was the case with Betsey Boughton, a mentee of Quintana-Ascencio’s. Betsey had a difficult time choosing a research project. According to Quintana-Ascencio, Betsey shifted through several projects before finally choosing the one she did. But when she did finally choose, it was the best decision she could have made.

“She owned that project,” Quintana-Ascencio says proudly, noting that he had not pushed her one way or another when it came to deciding on a research topic. “It was her project.” Indeed, Betsey’s passion for her research project led her to go above and beyond what was required. “She did experiments with thousands of plants,” says Quintana-Ascencio, “and she did this working extra hours, involving lots of people, and being creative.” And her dedication paid off: Betsey is now the Resource Director of MacArthur Agro-ecology Research Center (MAERC) at Archbold Biological Station, where she conducted her research. She went up against post-docs for the position, and according to Quintana-Ascencio, she earned that position based on the research she did and the passion she showed for it.

Quintana-Ascencio is convinced that a productive, successful mentor is one who guides, but doesn’t meddle. “We only train people to do things,” he says of the current system, “not to think. That’s not creativity.” Instead, Quintana-Ascencio recommends allowing students to explore their interests as fully as possible.

“Keep an eye on not imposing your ideas on the students,” he advises, “and respect the ideas of your students, and motivate creativity.” While this may be easier said than done, Quintana-Ascencio knows from first-hand experience that it is possible. With an environment of independence, collaboration, communication, and trust, mentors can empower students to pursue their own interests and ideas with passion and dedication. And that, according to Quintana-Ascencio, will produce more innovative science than mentor-imposed ideas could ever create.

Quintana-Ascencio understands the difficulties of letting students fly solo, in the lab and in the field of research, but an environment that encourages independence and individualism is key. “Give enough advice for the students to avoid the major problems,” he allows, “but give them enough leverage for them to try their own ideas, even if they look risky to us.”

“To me,” says Quintana-Ascencio, “the most exciting thing is to find a relevant question that will have some impact on our lives.” And if he can guide his students to finding that question, whatever it may be, then he has done his job well.