I have taught a PIC Math class for the past two years, in which students work on a project, provided by a professional liaison, that has a mathematics component to it. Students need to figure out what the professional contact is asking of them, determine what mathematical tools they need (with help from me) and develop a plan to solve the problem. As the instructor, I want the students to develop their own take on what is being asked of them and how they might go about solving it. They need structure and guidance, but also freedom and autonomy to make mistakes, and a sense of responsibility to the professional contact. I will share some of the ways I worked on finding that balance and helping students to do their best work. (Received September 20, 2016)