

Case #1: Mike Bertal

Mike Bertal always rolled up his sleeves when he entered his design classroom. A highly motivated and physically active professor in his late thirties, Mike still remembered what it was like to be a college student. He was committed to improving the educational experience of the next generation of engineers.

This semester, Mike was teaching an introductory engineering design course at his university – a large, public institution in the United States. Mike enjoyed involving his students in lively experiential activities, such as discussions of real-world applications and ethical and environmental issues. His teaching was founded on principles of collaborative learning. In recognition of his high satisfaction ratings from students, Mike recently won a university award for excellence in teaching.

One student in his class, who had recently come to the United States for undergraduate studies, seemed particularly reserved, perhaps even uncomfortable. The student did not participate in group discussions. His projects, although they were proficient, accurate and detailed, did not offer evidence of original thinking or creativity. Mike was concerned about the issue, but had not yet talked with the student.

Halfway into the semester, Mike gave his students an assignment which did not involve group work. This project required that his students develop a simple and practical solution to an engineering problem. This assignment would count for 25% of the students' grades in the class. Many of the students were excited about their task and began generating ideas immediately. They continued to gesture and describe their projects as they walked out into the hallway.

The international student approached Mike cautiously as Mike was gathering up his books. Addressing Mike formally, the student said, "Professor Bertal, I do not understand this project."