

Reflections

Greater understanding of the principles learned in the classroom setting comes from interacting with others to apply them. The Mexico study abroad class drove that point home for me. Throughout my college career, I have learned a great deal about structures and materials and soils and water, but it was all kind of distant and in its own sphere apart from real life. As I have been exposed to research and other real-world applications of the principles (especially through this course), I have been able to understand and apply the concepts more easily. In Mexico, we got to see, up close and personally, the problems facing the people in the different areas we visited. Seeing the problems helped to initiate the problem-solving aspect of my engineering education. I was able to visualize the problems and even possible solutions so that the work I was doing with the ITESO students would actually have meaning and be productive.

Working with the ITESO students also helped me realize that engineering is a highly interdependent discipline. If one side does not meet their commitment, the entire project may be delayed or compromised. As engineers, our analysis is only as good as the information and data that we have available. It is impossible to develop a reasonable runoff model for a typical storm event in an area if we do not have the rainfall data for that event (and aren't familiar enough with the area to know what a reasonable estimate might be). In order to get anything done in engineering, we must be able to communicate our needs and be able to understand the needs of the client we are working with. It does us no good to complete a project only to find out that the client was looking for something completely different. A good definition of goals at the beginning of a project is critical for success in that project. Using these goals, the engineer and client will be able to express their needs and desires with respect to the project and come up with the desired results.

Communication is an ever more important aspect of Civil Engineering. As the world becomes "flatter", we must be able to communicate with and understand different cultures and people. While speaking the language is an important part of communication, if you really want to communicate, you have to gain an understanding of the culture with which you are working. Working with the ITESO students helped us get a look into the Mexican culture and how they do their work. After making the trip down to visit them, I feel I have a better understanding of why they do some of the things they do and what I would need to do in the future to help make a project progress. Life in Mexico seems to be very relaxed and that attitude carries through to every aspect of their life. The Mexican people have different priorities and focuses in their lives than most Americans, and in order to be effective in working with them, it is important to understand those differences.

Every interaction we have and connection we make, whether it is in school or outside, will have an effect on what we are able to do in the future. As I mentioned earlier, engineering is extremely interdependent and the more we can network and develop friendships and trust between engineers, the better we will be able to do our job. We must be able to work as teams and take advantage of our differences to benefit the project. No two people are exactly the same and each has something different to contribute. We were able to see the team dynamic in our interactions with each other as BYU students and in our interactions with the ITESO students. I really feel that this course has helped increase my awareness and develop a greater understanding of how engineering will work when I get out into the work force.