

# Module 6

## The workplace

### A • An interview with Miguel Rosales, architect

Miguel Rosales, an architect living and working in the U.S.A., has more than 14 years of experience in urban design and bridge architecture.

#### **What exactly do you do as an architect working on bridge design?**

I have a lot of background in engineering, for one thing. I don't really have a traditional architectural background. I'm able to work a lot more closely with engineers on the structures because I have that knowledge. When I start to work on a project, I first work on the concept of how the structure is going to be in context and what type of structure is going to be selected. I work on the main idea. I also work with community groups to get their ideas of how they see the bridge fitting in their community.

#### **Do you make the preliminary drawings?**

Yes, I make models and perspectives and preliminary drawings. I also work on the architectural detailing in the final design phases. For example, the lighting is often very important because a lot of bridges want to be featured at night. So I work on the aesthetic lighting, how they are going to be lit. I also work on a lot of the more architectural type of details, like railings and signage. More and more people want to have these types of details in bridges. Before, bridges used to be very standardized. You just take a standard from a book and apply it and nobody really thinks if it's appropriate or if it's going to match the structure or not. And nowadays, there is this idea of trying to make it more comprehensive, with a style and kind of a family shape, so the whole system comes together. So then you have to do special detailing for the bridges; I get involved in that. And then the construction starts and I review the drawings.



#### **How long does it take on average from beginning concept to completion?**

The Charles River Bridge crossing in Boston, I started working on that in about 1989 to 1990, was completed in 2000. So it took 10 years. I would say it takes about a decade to do a major crossing.

#### **When you're coming up with an initial concept for a bridge, what are the things that you're looking for?**

I'm very interested in how a bridge fits in its context. Especially when it's a major crossing, it should reflect what is there and it should relate to something that is part of the landscape, of the architecture, or some other feature that makes it fit. The other aspect I'm very interested in is the proportions and the cultural value of the structure. And that is very

important to me. That's why I make a lot of 3-D drawings and models and computer drawings, to try to really see how the bridge is going to appear when it's built. If you travel between here and California by car, 90 percent of the bridges are unattractive. So people cannot imagine that they can be good-looking. It's kind of hard to understand that. But there are choices to be made and you just have to think about those considerations. That's something that I try to introduce into the design, in addition to resolving the functional and structural requirements of the crossing.

**Do you actually meet with community members? Do you hold public meetings or that sort of thing?**

Yes, definitely. That's part of all the projects. And I would say some of my success happens because the community members relate well to my work and they insist that somebody like me is involved in the projects.

**What do you like most about your work?**

I come from a background that, when I was growing up, there was nobody really in my community or where I was born who could have any influence on infrastructure at all. The way I was educated was that the government makes all the decisions and we just have to accept it. Now it's different and I'm happy about this.

**Where are you from originally?**

I was born in Guatemala. It's a very small country and the population does not really have any role in deciding anything that relates to government projects. And I find it very interesting here that

communities have a role. So I like working with the community; that gives me a lot of satisfaction, because it's like a model for democracy. They are paying for it, and it's coming from the taxes. And it's an enormous amount of money, you know, millions and millions of dollars. So I think they deserve to be listened to and I like being part of that process.

**When did you know you wanted to be an architect and how did you get into that field?**

I studied it in college. When I was in middle school and during high school, I had a lot of interest in art. That was one of my best classes. I don't know. It was kind of choice by elimination. I didn't really want to be a lawyer or a doctor. I thought I was pretty good in mathematics. I thought that would be helpful. I really didn't want to be a scientist either; I didn't want to study biology or chemistry. And I thought becoming a designer would be a good type of job.

**What advice would you have for a young person who wants to pursue a career in architecture or engineering?**

I would say you have to be committed to it and be interested in doing something like that. I think it's important to try to have some self-confidence in whatever you're going to do. It's going to be there and you're going to be able to live with it. Be prepared to take responsibility for your work, because once it's built, you can't really go back. I'm also interested in helping people make their life better. And I believe that whatever I try to do is related to that. If you're interested in people, improving their life in some way, I think that would be helpful, too.

**1** *Decide if the following statements are true or false. Correct the false statements.*

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|---|------------|
| 1. Miguel studies and background are basically in architecture.                                 | <b>T F</b> |
| 2. He is well prepared about how structures work.   | <b>T F</b> |
| 3. He first works on the structure he has to design and then puts it in the place it has to go. | <b>T F</b> |
| 4. He thinks details are very important.  | <b>T F</b> |
| 5. He wants to know what people think about his projects.                                       | <b>T F</b> |
| 6. He doesn't like people being involved in the building of infrastructures like bridges.       | <b>T F</b> |
| 7. Paying taxes give people the right of being involved in how their money is spent.            | <b>T F</b> |
| 8. Miguel's ambition has always been to become an architect.                                    | <b>T F</b> |
| 9. Miguel believes that he can contribute to improve the quality of people's lives.             | <b>T F</b> |
| 10. He says that working as an architect means to have strong responsibilities.                 | <b>T F</b> |