## HABITAT FOR HUMANITY

Our graduates must be prepared for a diverse workplace where others may not share the same "universal truths."

By Lorie Groll, Teri Reed, and Monica Cox

wo fish are swimming in a pond one I morning when they encounter a frog heading in the opposite direction. "Good morning," the frog says. "How's the water?" The flummoxed fish have no idea how to respond. They have no idea what "water" is.

Introducing this parable in a 2005 commencement address, novelist David Foster Wallace cautioned graduates that "the most

obvious, important realities are the hardest to see and talk about." Indeed, when we are surrounded by people who think alike and share the same "universal truths," it is difficult to see that these are only universal within our own local cultures. Like fish, we are blind to our assumptions about reality. Often, the only way we can see the "water" (culture) is to step outside of it.

That's no easy task. Humans have a hard time discussing culture - or even agreeing on its defi-

nition. Ethnologists A. L. Kroeber and Clyde Kluckhohn, for instance, identified at least 162 different definitions, each influenced by the cultural milieu in which it is discussed. Just as a right-handed person rarely notes his or her advantage over the left-handed person, people who grow up in society's dominant culture rarely need to question their own "obvious, important realities" or the position of privilege they represent.

This is not the case for those from marginalized cultures. In her keynote address at the College Board's 2014 national conference, consultant Noma LeMoine used a more dramatic fish-and-water analogy to discuss the experience of African-American and Latino students in the U.S. education system. Likening them to saltwater fish put in a freshwater pond, she described the bloating and uncomfortable death that ensues. Students from marginalized cultural backgrounds are told that the way they speak, dress, and walk is not only different, it is inferior, LeMoine explained. To stay afloat, these students must learn a new set of cultural rules. And they are

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> left on their own to figure out how to navigate in this new sink-or-swim environment. To add another level of complexity, these students often must identify ways to align their university and home cultures upon returning from campus.

> Educators notice that many underrepresented minority students are struggling to thrive at some universities and want to remedy the situation. But as LeMoine noted, they often begin by asking what is wrong with the students. Is it a saltwater fish's problem that it cannot function in a freshwater habitat? LeMoine asks educators to consider ways to reshape the paradigm of education to accommodate the new cultural landscape. To

expand on her analogy, we need to figure out how to help our students thrive in "brackish" environments.

Not so long ago, policymakers and engineering leaders highlighted ways to educate the "engineer of 2020." With less than five years left to align engineering programs with the National Academy of Engineering's recommendations, we cannot ignore

> the reality that in today's multinational technical workforce, our graduates will need to work with people who may not share the same "universal truths." Demonstrating technical proficiency is not sufficient. In order to be effective, the next generation of engineers must be able to reflect on their culture and question their values as they lead and work with others who will have values, assumptions, and realities very different from their own. They will need to be able to recognize and

describe the water around them, and understand that there are multiple ways to experience the place they call home.

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