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2022 Young Member Summit Scholarship

Growing up, I have always been told that perception is reality, that what people see, or think is what they'll take as fact. This holds true in how the public perceives structural engineers. Those who do not have direct connections to the industry hardly get a glimpse into the inner works of how a structure comes to life, so they do not have a strong grasp on how essential the engineering can really be to that process. In my opinion, the public perception of structural engineers could use improvement because there is a lack of connection to the public and interest from younger generations looking to find a career path to follow.

In school, they would ask us what we want to be when we grow up and the answers were always the same, a teacher, a firefighter, or even an architect! We had this idea that there are only so many careers that you can go into to make a change in the world. Somehow, engineering never made the list. The reality is that STEM careers were not discussed as in depth as other topics or career fields, so as a result there was a lack of interest in the field. Up until college, I was a part of the majority who had little to no idea what an engineer did, and it took time and research before I found myself interested in the field. Engineering was rarely discussed with us in school, and I believe that due to this lack of dialogue about STEM careers, the industry suffers.

The lack of discussion and recognition in the school system is, in my opinion, one of the biggest contributors to the current public perception of structural engineering. Like many careers in STEM, engineering has not been put on the radar in schools. However, as more and more people find themselves working toward careers in STEM, the perception has begun to change. More and more programs to introduce STEM to younger generations are coming to life, growing that presence. This same effort must extend to engineering specifically. Engineers provide an essential public service, and future generations need to be informed that it is a viable option to pursue to make an impact in the world.

To all of the new people I meet, whether it is through work or just around town, the exact logistics of what I do on a daily basis is completely unknown. It is never as simple as saying "I'm a banker" or "I'm a teacher" and so far, my experience as an engineer is very similar to that of my colleagues and peers. "What exactly does a structural engineer do?" is the question we always seem to be met with when meeting someone new and telling them our occupation. It's a mystery to many people and once explained, there's a pretty good chance you'll be met with the go-to frustrating follow-up: "So, you're like an architect?" For such an essential position to life as we know it, the structural engineer is quite underrated in my opinion. The title isn't widely known or understood by the public and as engineers, it is our duty to change that.

Although we are working toward the inclusion of engineering within the education system, there is still not enough awareness in the public as a whole. Far too often, people do not realize that engineers play such an essential role in society. With incredible structures coming to life every day with the help of engineers, the achievement is typically credited to the architects rather than shared with the engineers hiding behind the curtain. The silent and passive nature of the engineer contributes to the lack of their public perception. Engineers need to speak up and be more involved in the public aspect of our projects and should be proud of all the hard work that was put into these great achievements.

Instead, it seems the only time the engineer is brought into a discussion is when something catastrophic happens. When the building collapses, it's on the engineers and that is when the public and the media start talking about us. Engineers should increase interaction with the media and the public, to not only have open dialogue when something goes wrong, but when everything goes right! The conversation should be constant and evolving, so that engineers aren't painted in a bad light when something fails. However, that has not been how engineers work, they have always been very modest when it comes to their work. They have rarely demanded fame or credit for helping create the most awe-inspiring sky lines or ensuring that architectural designs are safe for inhabitants. To boost public interaction, engineers should be taking a more vocal position when it comes to their projects, so that we can become as widely known and understood as architects, teachers, and firefighters.

Without constantly building and improving our presence in the classroom or in the face of the public, structural engineering will always be stuck in the shadows. For playing such a crucial role in the function of our communities, the structural engineer gets little to no credit and is hardly known by the rest of the world. If public recognition is not pursued, the world will continue to not understand or appreciate the essential role they play. Without younger generations having a knowledge of engineering and finding a passion to pursue a career within it, the industry will fall even further down a path with less public recognition and all that may remain is a negative image of engineers, only to be brought up to be at fault when buildings fall. From the bridges we drive on to the homes we live in, a structural engineer helped make it happen and if a structural engineer wasn't involved, then watch your step!