Empowering Student Success: Unlocking the Potential of Project-Based Steel Design Education

Aly Mousaad Aly, PhD., PE, M.ASCE
Louisiana State University
aly@lsu.edu


Abstract. In the pursuit of student success, it is essential to acknowledge that a singular teaching style does not universally cater to all students. The educator's crucial role lies in creating an optimal learning environment that fosters students' endeavors to excel. This endeavor transcends mere classroom success or employment prospects, encompassing a broader impact on societal well-being. An experiential learning approach, where students actively engage in practical tasks, emerges as the most effective mode of instruction. Integrating project-based learning activities into the curriculum holds immense potential for enhancing student learning. Additionally, the utilization of analysis software tools like FTool and STAAD has proven to be instrumental in augmenting student interest in the subject matter. Furthermore, hands-on activities such as steel bridge design significantly contribute to the learning process. Moreover, the invaluable insights and experiences shared by industry professionals, specifically pertaining to steel design, enrich the educational experience and provide students with valuable perspectives.