Addressing SDG 4, Quality Education, by Expanding Global Quality Assurance Partnerships

Michael MILLIGAN, ABET, MD, United States
Future workforce (4)

Developing a well-educated, professional workforce is fundamental to solving the many complex problems associated with the Sustainable Development Goals (SDGs). In this presentation, the author will discuss those attributes most important to the future engineering workforce, as well as those methods currently being utilized to improve the quality of engineering education worldwide. The results of establishing both good practice as well as strong partnerships between global education systems will result in an ever expanded capacity of graduates prepared and ready to enter the engineering profession.

Critical to increasing capacity is the need to develop trusted relationships between educators and administrators, quality assurance organizations, industry and government. As a leading global accreditor of STEM education, ABET has been instrumental in leading the creation of several agreements between partner accreditors. Through these formal partnerships, students, graduates and faculty have increased their level of geographic, institutional, and professional mobility. Central to the success of these partnerships is the confidence that “quality” in one country or region is very similar to quality in another.

In addition to increased professional opportunities, the partnerships allow further evolution of the most important technical and professional skills of the “global engineer.” These skills are focused on ensuring students have the knowledge, skills and abilities to successfully enter the engineering profession upon graduation. But more importantly, they ensure the right set of skills to tackle the many problems associated with the SDGs. It’s critical that we agree on what this skill set encompasses, and ensure it’s focused on those skills most important to addressing the SDG challenges.

Increasing the capacity of well-educated technical professionals in many part of the world is central to global solutions. For example, many in the US will never have an opportunity to engage their fellow engineers in developing economies. In fact, these regions require a large, well-educated workforce as many of our most pressing sustainability challenges exist there.