

Editorial

This issue, 35-2, includes papers that address various topics in engineering education including: PBL, Military Veterans, Leadership, Motivation, Concept Inventory, Gender, Teamwork, Global Awareness, Conceptual Knowledge, Online Education, At-Risk Students, Social Responsibility, Transdisciplinary Design, Research Training, Student-Centered Learning, Entrepreneurship, Accreditation, Social Responsibility, Assessment, S-STEM, Flipped Classroom, STEM Projects, Electrical Circuits, Civil Engineering, Digital Systems, Fluid Mechanics Software Engineering, Data Mining, and Ground Water Modelling. The contributions are by authors from numerous countries including: USA, Trinidad, Spain, China, Canada, Sweden, South Korea, Portugal, Saudi Arabia, and Germany.

I wish to thank all the authors for their valuable contributions and I hope the readers find the issue useful and inspiring.

Prof. Robert Lucky presents a monthly inspiring article in the IEEE Spectrum, titled Reflections, and in the January 2019 edition Prof Lucky ponders about the “Making of A Great University”. In the article he states that: “My own belief is that in the end, the students make the school. I often think that at the Greats [referring to institutions with outsized awards and fame], the faculty itself is superfluous. Just get that group of students together and get out of the way. Good things will happen”. To a great extent I share this opinion; the privileged individual who attends the universities he refers to as the Greats most probably will be successful regardless of the faculty members; they are the ones who actually build the reputation of the school. These thoughts make me wonder about the meaning of greatness of universities and educators.

Imagine a hospital that accepts only healthy patients. By the way I know such a place that exists in Toronto, Canada. It specializes in one type of surgery and it accepts only healthy patients; it has developed a great reputation. It would be reasonable to assume that similar establishments exist elsewhere as well. However, a regular hospital that accepts the sick and the very sick is in no way less in greatness. They don't typically brag about their greatness although without them a health care system would collapse.

Universities and educators helping individuals to reach a level of success that was not attainable otherwise are of great value. It would be admirable of universities aspiring to “greatness” not follow the example of a hospital for the healthy only.

In the famous story Pygmalion by George Bernard Shaw, Professor Henry Higgins boasts about his ability to educate and pass off a Cockney flower girl as a princess with a limited time of training with her working hard and obeying all instructions. It would have been silly if he boasted about his ability to pass a princess as a princess. Although this is fiction, it is worthy of consideration by educators and evaluators.

I was delighted that Prof. Lucky ended the reflections by saying: “Engineers are accepted for who they are and what they have become. Other engineers have a good sense of who the good engineers are, and that matters a great deal in all that follows”.

Ahmad Ibrahim