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Engineering Leadership Assessment Tool Profile

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ABSTRACT

Numerous studies have been conducted stressing the importance of developing the professional skillset of engineers. This need has been further highlighted by the Engineering Criteria 2000 and by the National Academy of Engineers (Kumar and Hsiao, 2007, p. 19). Having realised the need to develop the professional skillset of engineers such as leadership, interpersonal skills, teamwork and communication, universities have started incorporating methods to hone these skills in their courses. However in today's competitive world, every practice needs to be assessed and measured for accountability and effectiveness. Engineering education is no exception to this rule. There needs to be a tool that can assess the leadership abilities of engineering students to see if courses are meeting their desired outcomes. This led to the creation of an assessment tool that can be used by students to self-assess themselves or by faculty to gauge a students' strengths and weaknesses. The tool reports personalised scores which can be compared with data obtained from a survey completed by 700 students to establish a baseline of leadership skills in comparison to one's peers. The tool can also guide students in selecting courses that can strengthen areas that they are currently lacking in. The tool, once validated, can be implemented on a larger scale and even be used in other universities.

KEYWORDS

Engineering Leadership, Assessment Tool, Student Evaluation, Self-assessment

REFERENCES

Kumar, S., & Hsiao, J. K. (2007). Engineers Learn "Soft Skills the Hard Way": Planting a Seed of Leadership in Engineering Classes. *Leadership and Management in Engineering*, 7, 18–23.