A study on the influence of learning styles of engineering stream students during the COVID-19 pandemic

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Learning is a lifelong process of transforming information and experience into knowledge, skills, behaviors, and attitudes. Apart from that, it is a combination of approaches, which relates the visual, auditory, and kinesthetic aspects. Since the engineers are designers, there is a need to study their involvement in various learning styles during the current pandemic situation in Sri Lanka. It has been noticed that most of the undergraduates of engineering faculties have failed to perform well in their examinations during the COVID-19 pandemic. This survey focuses on identifying appropriate means for teaching and learning activities. A questionnaire was circulated among the Engineering undergraduates from Sri Lankan universities. The questions were categorized under three major domains of learning styles and the responses were awarded a Likert scale system. The results were analyzed under three categories based on engineering discipline, gender, and year of study. The overall results show that half of the population prefers kinesthetic means followed by visual and auditory at 31% and 19% respectively. Under the visual style, most of the students mentioned that the best way to remember something is to picture it in their minds. The reply from the auditory preferring students depicts that there is a requirement to provide explanations for the diagrams, graphs, and visual directions for them to adapt. Kinesthetic students discover the importance of working with hands and making models. The results suggested that major efforts should be made to continue to improve the academic career of the engineering undergraduates with the suitable adaption of learning styles during the current situation. As this survey covers a limited number of responses, we can validate this study with the entire population. It can be concluded that the engineering undergraduates prefer more kinesthetic means during the study period for the betterment of their academic career.

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