Student Satisfaction and I-E-M Method Proposal for Improved Learning Experience of Generation Y and Generation Z Engineering Students

Romalyn L. Galingan
Industrial Engineering Department
Technological Institute of the Philippines
Quiezon City, Metro Manila, Philippines
rgalingan.ie@tip.edu.ph

Abstract

Generational cohorts are groups of individuals sharing birth years, history, and characteristics. The last Generation Y students are currently college and the Generation Z students are currently starting to stream into the tertiary level education. In a few years, the generation Z cohort will comprise the majority of the college and university students. Much research has been performed on matching learning styles to teaching styles, but not enough research has been done to match the learning preference to generational cohorts. Many instructors and educators believe that there are too many learning styles and factors to consider for each student, thereby deeming the classroom changes too difficult to institute. The goal of this research is to find the most significant predictors of student learning for generation Y and generation Z students. This study determined that generational cohort and learning preference are associated with each other. Specifically, this paper sought to ascertain if there is a significant difference between the learning styles and perceived level of importance of factors affecting engineering student’s level of satisfaction when grouped according to their respective generational cohort – Generation Y and Generation Z. This study used Descriptive Method. The survey questionnaire is pilot tested and validated for deployment to engineering student respondents. Statistical treatment is applied and the results of the data analysis showed that there is significant difference on the learning style of Generation Y and Generation Z engineering students. Results also showed that Generation Y engineering students see Teaching Method and Feedback and Learning Preferences as significant indicators of overall student satisfaction. On the other hand, Generation Z students find Teaching Method, Learning Environment and Feedback and Learning Preferences From these significant findings, the study puts forward the I-E-M method—Integrate, Evolve and Modernize framework that engineering colleges could adapt to optimize engineering student’s satisfaction.

Keywords
Cohort, Engineering Student, Generation Y, Generation Z, Learning Preference

Romalyn Galingan is an Assistant Professor of Industrial Engineering of the College of Engineering and Architecture at the Technological Institute of the Philippines where she is also serving as a coordinator of students undergoing On-the-job-training in engineering industries. She earned B.S. in Industrial Engineering from Technological Institute of the Philippines, Philippines and Master of Science in Industrial Engineering and management from the Polytechnic University of the Philippines. She has published journal and conference papers. Her research interests include operations research, optimization, feasibility studies, and lean. She is member of IEOM and IEEE.