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The Experiences of Male and Female Students of BET - Mechanical Engineering Technology, MSU-IIT, Iligan City: A Longitudinal Study

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Abstract: This longitudinal research project investigates the academic performance and gendered experiences of the pioneering cohort of the Bachelor of Engineering Technology major in Mechanical Engineering Technology (BET-MET) under the revised curriculum at MSU-IIT, Iligan City, Northern Mindanao, Philippines. It specifically analyzes the academic progression of male and female students from first year to fourth year, using their official grades recorded in the MSU-IIT computer system. The study combines both quantitative and qualitative approaches to provide a comprehensive understanding of students' academic outcomes and their gendered experiences within the program. A survey questionnaire was used to gather quantitative data from students, while individual interviews and Focus Group Discussions (FGDs) with faculty members captured qualitative insights. Wilcoxon's rank-sum test, also known as the Mann-Whitney U test, as adapted from Felder et al. (1998), was applied to determine significant differences in academic performance between male and female students. Additionally, qualitative content analysis was employed to interpret the narratives gathered from interviews and focus group discussions (FGDs). Findings reveal that students, regardless of gender, placed significant value on their coursework and demonstrated a strong sense of academic autonomy. However, female students reported instances of gender discrimination, particularly during their On-the-Job Training (OJT), pointing to persistent gender inequality in workplace environments. Furthermore, gender biases were identified in the curriculum and instructional practices of the BET-MET program. In light of these findings, the study recommends the implementation of a Phase 2 Gender Sensitivity Training Program targeting stakeholders of the BET-MET program under the College of Engineering and Technology (COET) as part of its Gender and Development (GAD) Extension initiative. This initiative aims to foster a more inclusive, equitable, and gender responsive academic environment.

Key Words: Gender and Engineering Education; Longitudinal Study; Mechanical Engineering Technology

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