

Can Engineering Students' Teamwork Skills Be Improved?

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The lack of effective teamwork has been identified among the most important factors contributing to the high failure rate of complex engineering projects. Therefore, it is essential that engineering students excel in teamwork skills in addition to the technical skills. In this study, we explore students' self efficacy and interest towards teamwork since the research suggests that the sufficient level of self efficacy can encourage personal growth and skill development and interest is a construct that can predict students' professional development in a domain. Therefore, we have developed and validated an instrument to measure teamwork efficacy and interest and collected data to identify the factors affecting students' attitudes toward interest and self-efficacy in teamwork as well as their relationships. The preliminary results indicated that students had a high level of self-efficacy and a low level of interest, which makes it challenging to improve students' teamwork skills. We suggest that instructors could institute more relatable, intriguing group assignments and emphasize the importance of teamwork in the engineering discipline; hence, students might make an effort to be more interested and have a positive attitude toward teamwork.