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## AN APPROACH TO DEAL WITH FREE RIDERS IN ASSESSED GROUP WORK. A CASE STUDY IN AN UNDERGRADUATE ENGINEERING PROGRAM

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## ABSTRACT

Group work are an essential component of engineering education programs. It is a challenge to assess individual contributions in a group work assessment. General approach is to provide an identical grade to all the group members. However, the problem with this approach is that of free riders, who benefits but contributes less than their fair share of the tasks in the group work. To overcome this issue a novel approach was employed. Two group assessments were considered in the analysis. After each assessment, the group was asked to submit a single report with a chapter on individual contributions. Students were asked to indicate the percentage of contribution from each member clearly specifying individual contribution. Students were asked to provide strong justification when two group members were given the same contribution percentage. Based on a questioner consisting of open-ended and multiple answer questions, 167 student feedback statements received. These statements were used to investigate the fairness and acceptability of the employed method.

Majority of (94%) students were satisfied with the percentage of contribution received from the group and 80% stated that it is fair to be evaluated by peers. Students have commended the method to be evaluated by peers since peers know the best about how each member have performed. Those who stated that the method is unfair, raised the difficulties of assigning a unique percentage for each member and requested to assign the same marks to several students. With this revision authors propose the usage of aforementioned method to avoid free riders.

Keywords: free riders, peer evaluation, group work assessment, engineering education