

# Reducing free-riding in group projects in line with students' preferences:

## Does it matter if there is more at stake?

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### Study purpose

Reducing free-riding is an important challenge for educators who use group projects. In this study, we measure students' preferences for group project characteristics and investigate if characteristics that better help to reduce free-riding become more important for students when stakes increase.

### Method

We used a discrete choice experiment based on twelve choice tasks in which students chose between two group projects that differed on five characteristics of which each level had its own effect on free-riding. A different group project grade weight was presented before each choice task to manipulate how much there was at stake for students in the group project. Data of 257 student respondents were used in the analysis.



Benning (2022)

### Example choice task

Suppose that the group project (of a newly designed course) counts for 10% of the final course grade. Which group project would you prefer?

	Group project A	Group project B
Team size	2 students	3 students
Team formation approach	assignment based on schedule availability and motivation	assignment based on schedule availability and motivation
Number of peer process evaluations	1 peer process evaluation	2 peer process evaluations
Type of grade	divided grade	divided grade
Method to handle free-riding	two-card system	member expulsion

I would prefer:

### Findings

Based on random parameter logit model estimates we find that students prefer (in order of importance) assignment based on schedule availability and motivation or self-selection (instead of random assignment), the use of one or two peer process evaluations (instead of zero), a small team size of three or two students (instead of four), a common grade (instead of a divided grade), and a discussion with the course coordinator without a sanction as a method to handle free-riding (instead of member expulsion). Furthermore, we find that the characteristic team formation approach becomes even more important (especially self-selection) when student stakes increase.

### Conclusion

Educators can use our findings to design group projects that better help to reduce free-riding by (1) avoiding random assignment as team formation approach, (2) using (one or two) peer process evaluations, and (3) creating small(er) teams.