

## EMPIRICS OF AN ONLINE ASSESSMENT SYSTEM FOR INDIVIDUAL SCORES (OASIS)

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### ABSTRACT

Thanks to their well-documented benefits, team projects are increasingly popular as a valuable learning/teaching tool in higher education. Fully realizing such benefits, however, is predicted on the presumption of no free riding. Hence, a suitably designed assessment method for team projects should *ex ante* discourage free riding before project commencement and *ex post* punish free riders when such behavior is found to exist upon project completion. This paper documents the empirics of a newly developed **Online Assessment System for Individual Scores (OASIS)** implemented by teachers of nine courses across five universities in the U.S., Hong Kong and India. Its key findings are as follows. First, OASIS encourages student participation in a team project through its contractual commitment and contribution-score relationship. Second, OASIS identifies and quantifies the extent of free ridership via negotiation in an end-of-project meeting among team members, thereby generating mutually agreed peer assessment data for individual scoring. Third, OASIS uses the peer assessment data to determine a team member's relative contribution based on median estimation, which is less susceptible to gaming and outlier biases than the alternative of mean estimation. Finally, OASIS automatically assigns individual scores to members of a project team based on their estimated relative contributions and the project's overall score set by a teacher, yielding individual scores that obey the principles of fairness and due diligence in academic assessment. Lending support to these findings is the continued interest in using OASIS of *all* participating teachers for their future courses. Further, student surveys indicate that OASIS can improve student perception on the educational value of team projects. Hence, OASIS deserves serious consideration by teachers worldwide who are already or consider using team projects in their teaching courses in different disciplines.

**Keywords:** Empirics; Online Assessment; Individual Scores; OASIS.