Teamable Analytics: A Team Formation and Analytics Tool

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ABSTRACT: Forming effective teams for large classes is a challenge for educators due to the complexity of project needs, the diversity of individual characteristics, and the criteria different educators have for forming teams. In previous work, we proposed an artificial intelligence algorithm that achieves competitive benchmarking results while scaling the performance to handle large class sizes and a large number of constraints (Bulmer et al., 2020). In this demo, we present a web application that uses this algorithm to support the team formation process called Teamable Analytics. Teamable Analytics is compatible with any learning management system (LMS) that uses the LTI protocol. Our tool provides a dashboard for educators to elicit student characteristics and customize how those responses are combined to form teams. We integrated Teamable Analytics with the Canvas LMS and completed four pilot studies with classes that have between 40 to 200 students (Bulmer, 2021). Based on the feedback, we added visual analytics, team regeneration with peer evaluation feedback, and default characteristics about student diversity commonly used in the literature for forming teams. Currently, we are piloting Teamable Analytics in six interdisciplinary classes across multiple university campuses as part of an evaluation for enterprise adoption (Hui et al., 2021).

Keywords: Team formation, team analytics, large class sizes, multiple constraints, LTI integration

1 DEMO VIDEO

The video is available at https://youtu.be/qAevPcDVhkY .

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