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David Burstein, Franklin Kenter* (kenter@usna.edu) and **Feng Shi**. *Leveraging local network communities to predict academic performance.*

Existing models for predicting academic outcomes in the classroom typically assume that observations are independent, even though peer interactions can play a crucial role in the learning process. Consequently, we propose a collection of novel predictors that account for this dependence by identifying a student's learning community, consisting of the peers that are most likely to influence a student's performance in a course. We evaluate the importance of these learning communities by predicting academic outcomes in an introductory college statistics course with 103 students. In particular, we observe that by including these learning community predictors, the resulting model is substantially more likely to be the correct model than existing non-network and state-of-the-art centrality network models in the literature. (Received September 24, 2018)