

Abstract Submitted
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Social Network Analysis to an online community of practice for high school teachers \f1 BAHAR MODIR, MICHAEL NADEAU, ROBYNNE LOCK, NEWTON WILLIAM, Texas AM University-Commerce — h *–abstract–* \pard We take a social network analysis approach to investigate how members of an online teacher community interact with each other as part of the Master program in physics with teaching emphasis at Texas A&M University-Commerce through a nine-week classical mechanics summer course. As part of the coursework, students are required to participate in weekly problem solving and biweekly reading reflection discussion boards. We measured the number of interactions and compared to the average number of interactions throughout the semester. We found the participation of students in problem solving discussions varies from week to week due to possible structural features of the course, such as the difficulty level of the video content, the homework, the level of comfort of the students with the mathematical methods and relevancy of the weekly content to the teaching practices. The reading reflection participation did not show a noticeable variation. Online communities can be used as mentorship models for novice teachers. Thus, studying factor(s) responsible for engagement helps to better understand the community learning. \pard- /abstract-

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