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The Impact of Network Embeddedness on Student Persistence JUSTYNA ZWOLAK, ERIC BREWE, Florida International University, INSPIRE TEAM — Society is constantly in flux, which demands the continuous development of our educational system to meet new challenges and impart the appropriate knowledge/skills to students. In particular, in order to improve student learning (among other things), the way we are teaching has significantly changed over the past few decades. We are moving away from traditional, lecture-based teaching towards a more interactive approach using, e.g., clicker questions, modeling instruction (MI), and other engagement strategies. A current, major challenge for universities is to increase student retention. I am examining the use of network analysis to investigate academic and social experiences of students in and beyond the classroom. There is a compelling case that transformed physics classes, such as ones that use MI, promote persistence by the creation of learning communities that support the integration of students into the university. I will discuss recent results connecting the MI approach to network structures in the students' interactions and how students' position impacts persistence in taking a subsequent MI vs. traditional lecture-based course.

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