Detailed studies of online interaction by small groups of students in the Virtual Math Teams project show that students are creative at adapting their subtle linguistic skills to the characteristics of online media. They are able to achieve impressive accomplishments of group cognition in exploring mathematical phenomena through dialogic interaction. However, this interaction is fragile and easily disrupted by external interventions of educators and surrogate educators. In particular, intelligent agents—designed to guide groups of students to maintain focus and to engage in productive discourse—can be particularly distracting.