

1154-Q1-2322 **Mel Henriksen*** (henriksenm@wit.edu), Wentworth Institute of Technology, 550 Huntington Ave, Boston, MA 02016, and **Mami Wentworth**, Wentworth Institute of Technology, 550 Huntington Ave, Boston, MA 02016. *Active Differential Equations, Whiteboard Pedagogy and Slope Fields*.

In our differential equations course, we employ an inquiry-based approach in which students work in groups at the whiteboard for most of the class time. For most lessons, students write their ideas and solutions directly on the whiteboard. We find that standing and working at the whiteboard has these advantages: it facilitates student interaction, it ensures that each person in the group is on the same page, it allows students to view their peers' work and compare it to their own, and it allows the instructor and TAs to see easily what each group is doing. First, we will discuss our Active Differential Equations curriculum, our classroom approach, as well as student feedback to group work in general. Secondly, we will focus on our implementation of this whiteboard pedagogy when covering Slope Fields and Euler's method. Previously, in our traditional classrooms, we had students use applications such as Dfield to draw slope fields and Desmos to draw piece-wise linear approximations to solutions functions. But we have found that using large, poster-size printed slope fields allows students to learn effectively while maintaining the advantages of the whiteboard pedagogy. Software applications are introduced to reinforce students' understanding after the initial lesson with posters. (Received September 17, 2019)