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Brian J Winkel* (brianwinkel@simiode.org). *Opportunities for Community in Using Modeling to Teach Differential Equations at SIMIODE.*

SIMIODE – Systemic Initiative for Modeling Investigations and Opportunities with Differential Equations (www.simiode.org) is an online and vibrant community of students and teachers interested in using modeling to motivate the study of differential equations. SIMIODE, a no-profit organization, now in its fifth year, is also currently supported by a National Science Foundation grant and all of its resources are FREE and downloadable under the most generous Creative Commons license. SIMIODE presents the opportunity for publishing double-blind, peer-reviewed Modeling Scenarios and Technique Narratives as well as hundreds of potential modeling activities and additional resources. Collaboration on projects of mutual interest is supported in SIMIODE. SIMIODE sponsors an annual student based event, SCUDEM – SIMIODE Challenge using Differential Equations Modeling, for students to do modeling and faculty to participate in a faculty development program on modeling in differential equations. We will offer an overview of these features and discuss details of several specific published Modeling Scenarios which have proven very successful by colleagues. (Received September 24, 2018)