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Steven LeMay\* (steven.lemay@uconn.edu), Megan Brown, Grace Wright and Fabiana Cardetti. Collaboration Across Disciplines Exploring Mathematical Tasks focused on Argumentation.

In this presentation, we will discuss the results of a study motivated by the current emphasis on argumentation in the new Common Core State Standards for Mathematics and its implications for the college mathematics curriculum. Our study focused on the analysis of mathematical tasks addressing the third Standard for Mathematical Practice that highlights argumentation as an expertise all students should develop. In this study we merged our expertise from mathematics and education to analyze 157 tasks from 40 schoolteachers participating in a professional development program focused on mathematical argumentation. We analyzed the effects of argumentation on the cognitive demand levels of the tasks, as well as how argumentation detracts or contributes to the mathematical content in the tasks. In addition, five different themes emerged from our analysis with regards to the interplay of argumentation and mathematical concepts. While our study was focused on school mathematics, this interdisciplinary collaboration helped us better understand the implications that the new standards will have in the curriculum at the college level especially in relation to argumentation. (Received September 21, 2015)