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Betsy McNeal and Sayonita Ghosh Hajra* (sayonita.ghoshhajra@csus.edu), California State University Sacramento, Department of Mathematics and Statistics, Sacramento, CA 95819, and Yajenny Patricia Pacheco Enamorado. Pre-service teachers' conceptions of area of a rectangle.

In this talk, we will share the data contrasting responses of ten pre-service teachers (PTs) to problems that were part of an ongoing study of PTs' conceptions of area of a rectangle at a public university in the United States. PTs were asked to respond to the following tasks- a) find the area of a rectangle in terms of a non-square rectangular unit and relate that to multiplication, and b) interpret a fictional child's attempt to connect the area formula with counting square units. We witnessed a pattern among some PTs in task (a) who could identify groups and number of objects in each group describing how many rectangular units can fit in a bigger rectangle but failed in task (b) to find the relationship between the area formula with counting square units and identifying the groups (and number of objects in each group). We found some PTs struggle to describe abstract groups, for example, struggle to distinguish between counting length units on an edge and counting "rows" as groups. Finally, we will tie the data back to the existing literature and present our future plans on continuing this study. (Received September 13, 2018)