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## Teaching College Geometry using Geometry MODULE(S<sup>2</sup>)

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**Lipika Deka**

California State University Monterey Bay

[Ldeka@csumb.edu](mailto:Ldeka@csumb.edu)

### **Abstract**

The Geometry modules developed by the MODULE(S<sup>2</sup>) Research Action Cluster was adopted and implemented to our College Geometry course, Math 329 at California State University, Monterey Bay during Fall 2015. Our College Geometry course is designed for Mathematics majors in the subject matter preparation (Teaching) concentration. This was the first time we adopted pedagogy for our Geometry course that focused on preparing high-quality mathematics teachers to teach the new generation of students in California schools under the Common Core standards. Earlier our course was taught as a content-based mathematics course in a traditional way. There were three modules in this new models, each followed an inquiry based learning approach that required a good amount of reading, writing and self-exploration by students inside and outside of classroom. The course also required group work on class activities and outside class assignments along with peer reviews of each other's work. This was a very new approach for our Geometry students. In this presentation, we will discuss how we adopted and implemented the modules for our students and how students learned Geometry in a new way that prepared them to be effective math teachers. We will share how our students reacted to the modules, our challenges teaching the course and discuss if this approach made any difference in preparing future quality mathematics teachers.