

1135-VK-3092

**Gianluca Guadagni\*** (gg5d@virginia.edu), **Hui Ma** and **Lindsay Wheeler**. *How Undergraduate Teaching Assistants can change mathematics education*. Preliminary report.

We have been supported by Undergraduate Teaching Assistants [UTAs] for several semesters in the Applied Mathematics program at our Engineering School. UTAs interact with students during class time by guiding them through the assigned material. Students are divided in groups and assigned a worksheet with questions and problems to be solved. UTAs roam the classroom and facilitate discussion in within each group, they follow the development of the task, support and assist groups with suggestions (but not with straight answers or solutions). The result that we will report is positive in terms of students performance, indeed a confirmation of previous similar experiments in STEM. The real novelty is the incredible benefit UTAs receive from their experience as peer educators. Our Department is increasing the participation of UTAs into our curriculum and we will report on the strategies we are adopting to improve the learning experience for UTAs in addition to improving the learning experience of our students as well, in almost all Applied Mathematics courses [Calculus I,II,III, ODE, Linear Algebra, Probability, Statistics, etc.]. Thanks to a recent grant we can now support our UTAs with training in educational methods and techniques to maximize their impact on students. (Received September 26, 2017)