

1046-X1-544 **Ryo Ohashi*** (ryoohashi@kings.edu), King's College, Department of Mathematics, Wilkes Barre, PA 18711. *Teaching Calculus Course using Creative hands-on Activities*. Preliminary report.

Students often have a hard time to understand abstract mathematics theories. In particular, it is common when we teach a beginning calculus course. Some of topics the students struggle to understand are: a concept of Riemann sums, areas between curves or solids of revolution, alias volume problems. I will bring and show you some cool gadgets I use for my in-class demonstrations to explain such the concepts. These gadgets are low tech devices that use no more than strings, food, a toilet plunger, party favorites and Play Doh. The audiences will notice that my hand-on demonstration helps students truly "see" and "feel" ideas of these theories.

My teaching strategies are not only used in high school calculus but they are also utilized in college classrooms, thus university faculty members or graduate teaching assistants are also welcome to attend. (Received September 07, 2008)