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Lina Wu^{*} (lwu@bmcc.cuny.edu), 529 West 42nd Street, Apt. 5K, New York, NY 10036. Maple Software Technology as a Stimulant Tool for Dynamic Interactive Calculus Teaching and Learning. Preliminary report.

The presenter is interested in sharing her research experiences on how to use the Maple Software technology as a valuable and powerful stimulant tool that provides dynamic and interactive methods in teaching and learning. During a sequence of pilot summer Calculus courses from 2013 to 2016 at Borough of Manhattan Community College, the presenter has designed many Calculus projects using Maple Software as her teaching strategies to assess students' learning. Maple projects of Polar Art in 2013, Funny Face in 2014, Geometric Abstract Art in 2015, and Culture Art in 2016 will be presented. Visualizing the beauty of math-related artwork created by computer-generated diagrams in Maple has ignited students' passion to learn Calculus. Demonstrating animated graphic images and simplified symbolic calculation in Maple has enhanced students' understanding abilities on abstract math concepts. Practicing on Maple projects has increased students' problem-solving skills in math. These pilot Calculus sequence courses were supported by MSEIP Grant (Minority Science Engineering Improvement Program) and ELIC (Enhanced Learning in Classroom Teaching Fund). (Received August 28, 2016)