

1086-VP-2578 **Shenglan Yuan*** (syuan@lagcc.cuny.edu), 31-10 Thomson Ave., LaGuardia Community College, CUNY, Long Island City, NY 11101. *Learning math like a mathematician*. Preliminary report.

In recent years there has been a national push to engage undergraduate STEM majors in experimental math research. Taking on real problems challenges students, stimulates their creativity, and gives them a taste of the kind of work that lies ahead if they choose to continue their math studies. Research centers across the nation offer funding and provide residential research programs for interested.

But for community college students interested in research, there are few opportunities, and little funding. An institutional assumption that significant math maturity is required for research has stymied interested students at two-year colleges. We ask if students should be engaged in research from the beginning of their college career. Rather than teach them math skills so that they can one day do research, perhaps we should engage them in research to help them learn the math skills.

We offer a set of basic questions that will lead to open questions. They require little knowledge of college level math and are crafted to direct undergraduate students (specifically at community colleges) to experiment in a way that will lead to their own discoveries—and to thinking like a mathematician. (Received September 25, 2012)